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Diploma Programme

Economics guide

First examinations 2013

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The International Baccalaureate (IB) offers three high quality and challenging educational programmes for a worldwide community of schools, aiming to create a better, more peaceful world.

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IB mission statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

IB learner profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

IB learners strive to be:

Inquirers They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.

Knowledgeable They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.

Thinkers They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.

Communicators They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.

Principled They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.

Open-minded They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view, and are willing to grow from the experience.

Caring They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.

Risk-takers They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.

Balanced They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.

Reflective They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.

Contents

Purpose of this document

This publication is intended to guide the planning, teaching and assessment of the subject in schools. Subject teachers are the primary audience, although it is expected that teachers will use the guide to inform students and parents about the subject.

This guide can be found on the subject page of the online curriculum centre (OCC) at http://occ.ibo.org, a password-protected IB website designed to support IB teachers. It can also be purchased from the IB store at http://store.ibo.org.

Additional resources

Additional publications such as teacher support materials, subject reports, internal assessment guidance and grade descriptors can also be found on the OCC. Specimen and past examination papers as well as markschemes can be purchased from the IB store.

Teachers are encouraged to check the OCC for additional resources created or used by other teachers. Teachers can provide details of useful resources, for example: websites, books, videos, journals or teaching ideas.

First examinations 2013

The Diploma Programme

The Diploma Programme is a rigorous pre-university course of study designed for students in the 16 to 19 age range. It is a broad-based two-year course that aims to encourage students to be knowledgeable and inquiring, but also caring and compassionate. There is a strong emphasis on encouraging students to develop intercultural understanding, open-mindedness, and the attitudes necessary for them to respect and evaluate a range of points of view.

The Diploma Programme hexagon

The course is presented as six academic areas enclosing a central core. It encourages the concurrent study of a broad range of academic areas. Students study: two modern languages (or a modern language and a classical language); a humanities or social science subject; an experimental science; mathematics; one of the creative arts. It is this comprehensive range of subjects that makes the Diploma Programme a demanding course of study designed to prepare students effectively for university entrance. In each of the academic areas students have flexibility in making their choices, which means they can choose subjects that particularly interest them and that they may wish to study further at university.

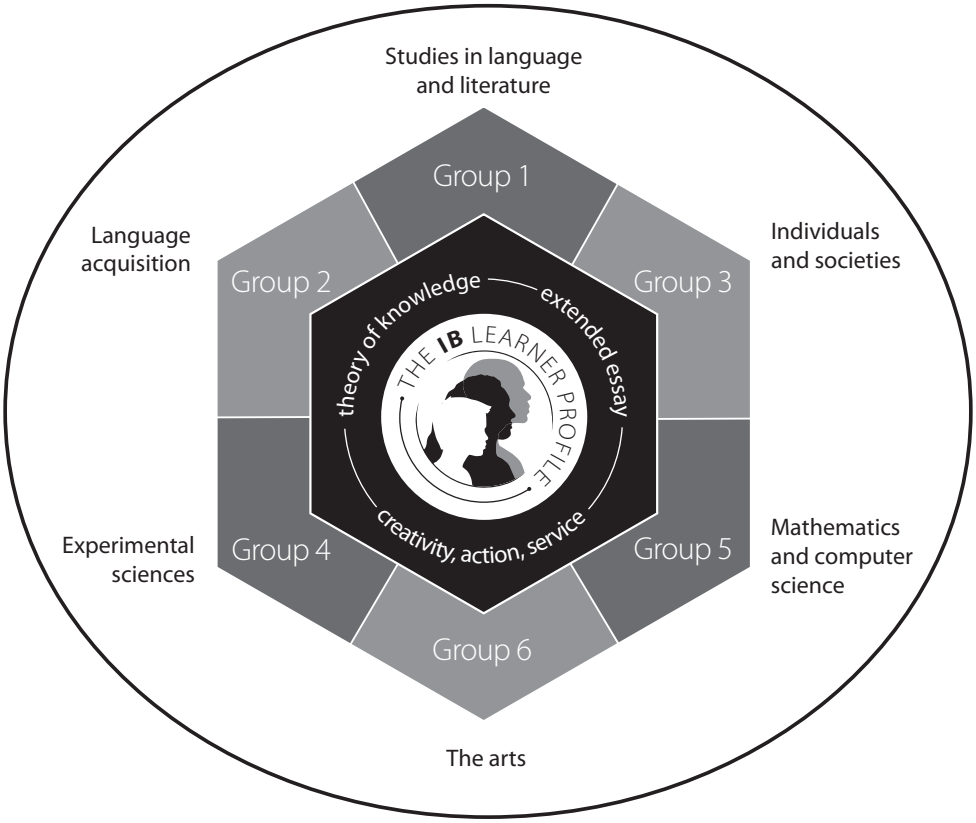

Figure 1
Diploma Programme model

Choosing the right combination

Students are required to choose one subject from each of the six academic areas, although they can choose a second subject from groups 1 to 5 instead of a group 6 subject. Normally, three subjects (and not more than four) are taken at higher level (HL), and the others are taken at standard level (SL). The IB recommends 240 teaching hours for HL subjects and 150 hours for SL. Subjects at HL are studied in greater depth and breadth than at SL.

At both levels, many skills are developed, especially those of critical thinking and analysis. At the end of the course, students' abilities are measured by means of external assessment. Many subjects contain some element of coursework assessed by teachers. The course is available for examinations in English, French and Spanish.

The core of the hexagon

All Diploma Programme students participate in the three course requirements that make up the core of the hexagon. Reflection on all these activities is a principle that lies at the heart of the thinking behind the Diploma Programme.

The theory of knowledge course encourages students to think about the nature of knowledge, to reflect on the process of learning in all the subjects they study as part of their Diploma Programme course, and to make connections across the academic areas. The extended essay, a substantial piece of writing of up to 4,000 words, enables students to investigate a topic of special interest that they have chosen themselves. It also encourages them to develop the skills of independent research that will be expected at university. Creativity, action, service involves students in experiential learning through a range of artistic, sporting, physical and service activities.

The IB mission statement and the IB learner profile

The Diploma Programme aims to develop in students the knowledge, skills and attitudes they will need to fulfill the aims of the IB, as expressed in the organization's mission statement and the learner profile. Teaching and learning in the Diploma Programme represent the reality in daily practice of the organization's educational philosophy.

Nature of the subject

Economics is a dynamic social science, forming part of group 3—individuals and societies. The study of economics is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements.

The IB Diploma Programme economics course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values.

The economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

Distinction between SL and HL

SL and HL students of economics are presented with a common syllabus, with an HL extension in some topics. The syllabus for both SL and HL students requires the development of certain skills and techniques, attributes and knowledge—as described in the assessment objectives of the programme.

While the skills and activity of studying economics are common to both SL and HL students, the HL student is required to acquire a further body of knowledge—including the ability to analyse, synthesize and evaluate that knowledge—and to develop quantitative skills in order to explain and analyse economic relationships. These quantitative skills are specifically assessed at HL in paper 3.

Prior learning

The economics course requires no specific prior learning. No particular background in terms of specific subjects studied for national or international qualifications is expected or required. The specific skills of the economics course are developed within the context of the course itself. The ability to understand and explain abstract concepts and the ability to write in a logically structured manner are distinct advantages in economics.

Links to the Middle Years Programme

The development of certain skills in the Middle Years Programme (MYP) humanities course of study is excellent preparation for a Diploma Programme course in economics, which requires the student to undertake research, to demonstrate understanding and knowledge of concepts, and to exhibit the capacity to think critically.

The following specific skills, for example, which are identified and developed in the MYP humanities course, are encouraged in the Diploma Programme economics course.

- The ability to use sources such as graphs and tables in a critical manner
- The ability to analyse and interpret information from a wide range of sources
- The ability to make well-substantiated decisions and to relate them to real-world contexts

Economics and theory of knowledge

Students of group 3 subjects study individuals and societies. This means that they explore the interactions between humans and their environment in time and place. As a result, these subjects are often known collectively as the "human sciences" or "social sciences".

As with other subject areas, there is a variety of ways in which to gain knowledge in group 3 subjects. For example, archival evidence, data collection, experimentation, observation, inductive and deductive reasoning can all be used to help explain patterns of behaviour and lead to knowledge claims. Students in group 3 subjects are required to evaluate these knowledge claims by exploring knowledge issues such as validity, reliability, credibility, certainty, and individual as well as cultural perspectives.

The relationship between each subject and theory of knowledge (TOK) is of crucial importance and fundamental to the Diploma Programme. Having followed a course of study in group 3, students should be able to reflect critically on the various ways of knowing and the methods used in human sciences, and in doing so, become the "inquiring, knowledgeable and caring young people" of the IB mission statement.

During the economics course a number of issues will arise that highlight the relationships between TOK and economics. Some of the questions that could be considered during the course are identified within the syllabus (see the section "The foundations of economics" in "Approaches to the teaching of economics", as well as "Syllabus"). Teachers and their students are encouraged to explore further questions of their own.

Economics and the international dimension

The economics course embodies global and international awareness in several distinct ways. Two of the four sections of the course are devoted to specific areas of economics that contribute to international awareness and understanding—section 3: international economics, and section 4: development economics. In addition, earlier topics in the course explore the ways in which different countries deal with common economic issues such as government intervention, market failure, sustainability, and achieving macroeconomic objectives. Inherent in the syllabus is a consideration of different perspectives, economic circumstances, and social and cultural diversity.

Economics seeks to develop international understanding and foster a concern for global issues, as well as to raise students' awareness of their own responsibility at a local and national level. Economics also aims to develop values and attitudes that will help students reach a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interconnected world.

Aims

Group 3 aims

The aims of all subjects in **group 3, individuals and societies** are to:

1. encourage the systematic and critical study of: human experience and behaviour; physical, economic and social environments; and the history and development of social and cultural institutions
2. develop in the student the capacity to identify, to analyse critically and to evaluate theories, concepts and arguments about the nature and activities of the individual and society
3. enable the student to collect, describe and analyse data used in studies of society, to test hypotheses, and to interpret complex data and source material
4. promote the appreciation of the way in which learning is relevant both to the culture in which the student lives, and to the culture of other societies
5. develop an awareness in the student that human attitudes and beliefs are widely diverse and that the study of society requires an appreciation of such diversity
6. enable the student to recognize that the content and methodologies of the subjects in group 3 are contestable and that their study requires the tolerance of uncertainty.

Economics aims

In addition, the aims of the **economics** syllabus at SL and HL are to enable students to:

7. develop an understanding of microeconomic and macroeconomic theories and concepts and their real-world application
8. develop an appreciation of the impact on individuals and societies of economic interactions between nations
9. develop an awareness of development issues facing nations as they undergo the process of change.

Assessment objectives

There are four assessment objectives (AOs) for the SL and HL economics course. Having followed the economics course at SL or HL, students will be expected to do the following:

1. Demonstrate knowledge and understanding of specified content
   - Demonstrate knowledge and understanding of the common SL/HL syllabus
   - Demonstrate knowledge and understanding of current economic issues and data
   - **At HL only:** Demonstrate knowledge and understanding of the higher level extension topics
2. Demonstrate application and analysis of knowledge and understanding
   - Apply economic concepts and theories to real-world situations
   - Identify and interpret economic data
   - Demonstrate the extent to which economic information is used effectively in particular contexts
   - **At HL only:** Demonstrate application and analysis of the extension topics
3. Demonstrate synthesis and evaluation
   - Examine economic concepts and theories
   - Use economic concepts and examples to construct and present an argument
   - Discuss and evaluate economic information and theories
   - **At HL only:** Demonstrate economic synthesis and evaluation of the extension topics
4. Select, use and apply a variety of appropriate skills and techniques
   - Produce well-structured written material, using appropriate economic terminology, within specified time limits
   - Use correctly labelled diagrams to help explain economic concepts and theories
   - Select, interpret and analyse appropriate extracts from the news media
   - Interpret appropriate data sets
   - **At HL only:** Use quantitative techniques to identify, explain and analyse economic relationships

Assessment objectives in practice

Assessment objectives	SL/HL Paper 1	SL/HL Paper 2	HL Paper 3	SL/HL Internal assessment	Overall
1.1. Knowledge and understanding	30%	35%	30%	20%	30% (SL) 30% (HL)
1.2. Application and analysis	30%	30%	30%	35%	30% (SL) 30% (HL)
1.3. Synthesis and evaluation	20%	25%	0%	25%	25% (SL) 20% (HL)
1.4. Selection, use and application of a variety of appropriate skills and techniques	20%	10%	40%	20%	15% (SL) 20% (HL)

Command terms

Classification of command terms

Key command terms are used both in the syllabus content and in examination questions to indicate depth of treatment. They are classified below according to the assessment objectives of:

- AO1—knowledge and understanding of specified content
- AO2—application and analysis of knowledge and understanding
- AO3—synthesis and evaluation
- AO4—selection, use and application of a variety of appropriate skills and techniques.

There is a progression in demand from AO1 to AO3, while AO4 terms are specific to particular skills and techniques, and also to examination questions.

Teachers and students must be familiar with these terms in order to understand the depth of treatment required in examination questions.

A command term used in an examination question will either be from the same classification as specified in the learning outcomes, or a less demanding command term from a lower classification. For example, if the command term in the learning outcome is "explain", which is classified as AO2, an examination question could contain the command term "explain" or another command term, such as "suggest", which is also classified as AO2. Alternatively, the examination question could contain a command term from AO1, such as "describe". However, a more demanding command term, such as "evaluate", from a higher classification (AO3 in this case), cannot be used.

The command terms within each classification are listed in alphabetical order in the following table.

Definitions of these command terms are listed in "Glossary of command terms" as an appendix to this guide.

Assessment objective	Key command term	Depth
AO1—knowledge and understanding	Define Describe List Outline State	These terms require students to learn and comprehend the meaning of information.
AO2—application and analysis	Analyse Apply Comment Distinguish Explain Suggest	These terms require students to use their knowledge to explain actual situations, and to break down ideas into simpler parts and to see how the parts relate.
AO3—synthesis and evaluation	Compare Compare and contrast Contrast Discuss Evaluate Examine Justify To what extent	These terms require students to rearrange component ideas into a new whole and make judgments based on evidence or a set of criteria.
AO4—selection, use and application of a variety of appropriate skills and techniques	Calculate Construct Derive Determine Draw Identify Label Measure Plot Show Show that Sketch Solve	These terms require students to demonstrate the selection and application of skills.

Syllabus outline

Syllabus component	Teaching hours	
	SL	HL
Section 1: Microeconomics 1.1 Competitive markets: demand and supply **(some topics HL only)** 1.2 Elasticity 1.3 Government intervention **(some topics HL extension, plus one topic HL only)** 1.4 Market failure **(some topics HL only)** 1.5 **Theory of the firm and market structures (HL only)**	35	95
Section 2: Macroeconomics 2.1 The level of overall economic activity **(one topic HL extension)** 2.2 Aggregate demand and aggregate supply **(one topic HL only)** 2.3 Macroeconomic objectives **(some topics HL extension, plus one topic HL only)** 2.4 Fiscal policy 2.5 Monetary policy 2.6 Supply-side policies	40	50
Section 3: International economics 3.1 International trade **(one topic HL extension, plus one topic HL only)** 3.2 Exchange rates **(some topics HL extension)** 3.3 The balance of payments **(one topic HL extension, plus some topics HL only)** 3.4 Economic integration **(one topic HL extension)** 3.5 **Terms of trade (HL only)**	25	45

Syllabus component	Teaching hours	
	SL	HL
Section 4: Development economics 4.1 Economic development 4.2 Measuring development 4.3 The role of domestic factors 4.4 The role of international trade **(one topic HL extension)** 4.5 The role of foreign direct investment (FDI) 4.6 The roles of foreign aid and multilateral development assistance 4.7 The role of international debt 4.8 The balance between markets and intervention	30	30
Internal assessment Portfolio of three commentaries	20	20
Total teaching hours	**150**	**240**

Approaches to the teaching of economics

The economics syllabus is designed to allow sufficient time within the recommended teaching hours (150 at SL, 240 at HL) for in-depth analysis and evaluation, and consolidation of learning.

The overall aim of the course is to give students a deeper understanding of the nature and scope of economics. The different parts of the course are designed to complement each other enabling students to develop a range of fundamental economic skills. Teachers are encouraged, therefore, to tailor the course to both their students' interests and the school's context.

Structure of the syllabus

The syllabus consists of four sections.

- Microeconomics
- Macroeconomics
- International economics
- Development economics

These four sections will be examined and assessed.

Each section is divided into sub-sections. These are, in turn, divided into sub-topics, some of which include further HL material. Each sub-topic is broken down into a number of further ideas, which have command terms that determine the learning outcome. This is presented as follows.

Sub-topic	SL/HL core	HL
Equity in the distribution of income		
The role of taxation in promoting equity	• Distinguish between direct and indirect taxes, providing examples of each, and explain that direct taxes may be used as a mechanism to redistribute income. • Distinguish between progressive, regressive and proportional taxation, providing examples of each.	• Calculate the marginal rate of tax and the average rate of tax from a set of data.

The order of the content is not an indication of how these sub-sections and sub-topics are to be delivered, and teachers are encouraged to construct their own approach to teaching and learning.

Only topics listed in these columns will be selected for assessment in the examination papers. Where "including" is followed by a list (for example, "Discuss the limitations of interventionist policies, including excessive bureaucracy, poor planning and intervention"), these must be studied. However, this does not preclude teachers going beyond that list if they so wish.

Examination questions will not exceed the demands of the command terms used in this syllabus, although the command terms used do not prescribe the exact wording of examination questions. For further discussion of the command terms, please see the section "Command terms" (including "Classification of command terms") in "Assessment objectives in practice". See also "External assessment" and "Glossary of command terms".

Teachers must introduce students to the economic terms that appear in each of the four sections of the syllabus. Students are expected to demonstrate the ability to define these economic terms. Teachers must also introduce students to the accurate use of diagrams and appropriate use of examples.

Theory of knowledge (TOK) discussion points are included at the end of sub-sections. Teachers and their students are encouraged to use these examples as part of their exploration of the interrelationship between TOK and economics. See also the section "Economics and theory of knowledge" in "Nature of the subject", as well as the list of potential connections at the end of "The foundations of economics" below.

The foundations of economics

While there is no formal introductory section in the syllabus, teachers must introduce students to the fundamentals of economics.

The following introduction is an example of a possible unit of work to introduce students to the economics syllabus. However, teachers may wish to take an entirely different approach.

This unit introduces key, overarching, economic concepts that appear throughout the course. These will be examined and assessed where they appear in the four sections of the syllabus (microeconomics, macroeconomics, international economics and development economics).

Concept	Teaching approach
Economics as a social science	• Explain that economics is a social science. • Outline the social scientific method. • Explain the process of model building in economics. • Explain that economists must use the *ceteris paribus* assumption when developing economic models. • Distinguish between positive and normative economics. • Examine the assumption of rational economic decision-making.
Scarcity	• Explain that scarcity exists because factors of production are finite and wants are infinite. • Explain that economics studies the ways in which resources are allocated to meet needs and wants. • Explain that the three basic economic questions that must be answered by any economic system are: "What to produce?", "How to produce?" and "For whom to produce?"

Concept	Teaching approach
Choice and opportunity cost	• Explain that as a result of scarcity, choices have to be made. • Explain that when an economic choice is made, an alternative is always foregone. • Explain that a production possibilities curve (production possibilities frontier) model may be used to show the concepts of scarcity, choice, opportunity cost and a situation of unemployed resources and inefficiency.
Central themes	• Explain that the economics course will focus on several themes, which include: – the extent to which governments should intervene in the allocation of resources – the threat to sustainability as a result of the current patterns of resource allocation – the extent to which the goal of economic efficiency may conflict with the goal of equity – the distinction between economic growth and economic development.

The following list gives examples of theory of knowledge discussion points that teachers may use with students as part of this unit of work. The list is not intended to be either prescriptive or exhaustive.

Theory of knowledge: potential connections

What distinguishes a social science from a natural science?

Is there a "social scientific method" as opposed to a "natural scientific method"? What might be the similarities and differences?

What are the roles played by abstract reasoning and concrete evidence in constructing economic theory?

To what extent is economics value-free?

Are economic theories independent of culture?

Is it possible for economic laws to change over time?

What are the limitations of the use of diagrams and charts in economics?

What is the role of emotion and creativity in economics?

What are the implications of economics being based, ultimately, on human psychology?

To what extent should ideas of fairness and justice inform economic thinking?

What is a model in economics? What does it do? Does it matter that many of the models we use in economics do not correspond well to reality?

What are the implications of the assumption of *ceteris paribus*? Do other areas of knowledge make a similar assumption?

How do we test knowledge claims in economics? Should all knowledge claims in economics be testable? If a claim is not testable, is it meaningless?

Is there a different method of justifying qualitative rather than quantitative knowledge claims? If so, does this lead to one or other being inherently more reliable?

What criteria should be adopted for evaluating normative statements in economics?

What is meant by "rationality" in economics? Are there different types of "economic rationality"?

If economics studies actual human behaviour, should it also study irrational human behaviour?

Syllabus content

Section 1: Microeconomics

1.1 Competitive markets: Demand and supply

Sub-topic	SL/HL core	HL
Markets		
The nature of markets	• Outline the meaning of the term market.	
Demand		
The law of demand	• Explain the negative causal relationship between price and quantity demanded. • Describe the relationship between an individual consumer's demand and market demand.	
The demand curve	• Explain that a demand curve represents the relationship between the price and the quantity demanded of a product, *ceteris paribus*. • Draw a demand curve.	
The non-price determinants of demand (factors that change demand or shift the demand curve)	• Explain how factors including changes in income (in the cases of normal and inferior goods), preferences, prices of related goods (in the cases of substitutes and complements) and demographic changes may change demand.	
Movements along and shifts of the demand curve	• Distinguish between movements along the demand curve and shifts of the demand curve. • Draw diagrams to show the difference between movements along the demand curve and shifts of the demand curve.	

Sub-topic	SL/HL core	HL
Linear demand functions (equations), demand schedules and graphs		• Explain a demand function (equation) of the form Qd = a – bP. • Plot a demand curve from a linear function (eg. Qd = 60 – 5P). • Identify the slope of the demand curve as the slope of the demand function Qd = a – bP, that is –b (the coefficient of P). • Outline why, if the "a" term changes, there will be a shift of the demand curve. • Outline how a change in "b" affects the steepness of the demand curve.
Supply		
The law of supply	• Explain the positive causal relationship between price and quantity supplied. • Describe the relationship between an individual producer's supply and market supply.	
The supply curve	• Explain that a supply curve represents the relationship between the price and the quantity supplied of a product, *ceteris paribus*. • Draw a supply curve.	
The non-price determinants of supply (factors that change supply or shift the supply curve)	• Explain how factors including changes in costs of factors of production (land, labour, capital and entrepreneurship), technology, prices of related goods (joint/competitive supply), expectations, indirect taxes and subsidies and the number of firms in the market can change supply.	

Sub-topic	SL/HL core	HL
Movements along and shifts of the supply curve	• Distinguish between movements along the supply curve and shifts of the supply curve. • Draw diagrams to show the difference between movements along the supply curve and shifts of the supply curve.	
Linear supply functions, equations and graphs		• Explain a supply function (equation) of the form Qs = c + dP. • Plot a supply curve from a linear function (eg, Qs = –30 + 20 P). • Identify the slope of the supply curve as the slope of the supply function Qs = c + dP, that is d (the coefficient of P). • Outline why, if the "c" term changes, there will be a shift of the supply curve. • Outline how a change in "d" affects the steepness of the supply curve.
Market equilibrium		
Equilibrium and changes to equilibrium	• Explain, using diagrams, how demand and supply interact to produce market equilibrium. • Analyse, using diagrams and with reference to excess demand or excess supply, how changes in the determinants of demand and/or supply result in a new market equilibrium.	
Calculating and illustrating equilibrium using linear equations		• Calculate the equilibrium price and equilibrium quantity from linear demand and supply functions. • Plot demand and supply curves from linear functions, and identify the equilibrium price and equilibrium quantity. • Calculate the quantity of excess demand or excess supply in the above diagrams.

Sub-topic	SL/HL core	HL
The role of the price mechanism		
Resource allocation	• Explain why scarcity necessitates choices that answer the "What to produce?" question. • Explain why choice results in an opportunity cost. • Explain, using diagrams, that price has a signalling function and an incentive function, which result in a reallocation of resources when prices change as a result of a change in demand or supply conditions.	
Market efficiency		
Consumer surplus	• Explain the concept of consumer surplus. • Identify consumer surplus on a demand and supply diagram.	
Producer surplus	• Explain the concept of producer surplus. • Identify producer surplus on a demand and supply diagram.	
Allocative efficiency	• Evaluate the view that the best allocation of resources from society's point of view is at competitive market equilibrium, where social (community) surplus (consumer surplus and producer surplus) is maximized (marginal benefit = marginal cost).	

Theory of knowledge: potential connections

To what extent is it true to say that a demand curve is a fictional entity?

What assumptions underlie the law of demand? Are these assumptions likely to be true? Does it matter if these assumptions are actually false?

1.2 Elasticity

Sub-topic	SL/HL core	HL
Price elasticity of demand (PED)		
Price elasticity of demand and its determinants	• Explain the concept of price elasticity of demand, understanding that it involves responsiveness of quantity demanded to a change in price, along a given demand curve. • Calculate PED using the following equation. $PED = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in price}}$ • State that the PED value is treated as if it were positive although its mathematical value is usually negative. • Explain, using diagrams and PED values, the concepts of price elastic demand, price inelastic demand, unit elastic demand, perfectly elastic demand and perfectly inelastic demand. • Explain the determinants of PED, including the number and closeness of substitutes, the degree of necessity, time and the proportion of income spent on the good. • Calculate PED between two designated points on a demand curve using the PED equation above. • Explain why PED varies along a straight line demand curve and is not represented by the slope of the demand curve.	
Applications of price elasticity of demand	• Examine the role of PED for firms in making decisions regarding price changes and their effect on total revenue. • Explain why the PED for many primary commodities is relatively low and the PED for manufactured products is relatively high. • Examine the significance of PED for government in relation to indirect taxes.	
Cross price elasticity of demand (XED)		
Cross price elasticity of demand and its determinants	• Explain the concept of cross price elasticity of demand, understanding that it involves responsiveness of demand for one good (and hence a shifting demand curve) to a change in the price of another good. • Calculate XED using the following equation. $XED = \frac{\text{percentage change in quantity demanded of good } x}{\text{percentage change in price of good } y}$ • Show that substitute goods have a positive value of XED and complementary goods have a negative value of XED. • Explain that the (absolute) value of XED depends on the closeness of the relationship between two goods.	

Sub-topic	SL/HL core	HL
Applications of cross price elasticity of demand	• Examine the implications of XED for businesses if prices of substitutes or complements change.	
Income elasticity of demand (YED)		
Income elasticity of demand and its determinants	• Explain the concept of income elasticity of demand, understanding that it involves responsiveness of demand (and hence a shifting demand curve) to a change in income. • Calculate YED using the following equation. $YED = \frac{percentage\ change\ in\ quantity\ demanded}{percentage\ change\ in\ income}$ • Show that normal goods have a positive value of YED and inferior goods have a negative value of YED. • Distinguish, with reference to YED, between necessity (income inelastic) goods and luxury (income elastic) goods.	
Applications of income elasticity of demand	• Examine the implications for producers and for the economy of a relatively low YED for primary products, a relatively higher YED for manufactured products and an even higher YED for services.	
Price elasticity of supply (PES)		
Price elasticity of supply and its determinants	• Explain the concept of price elasticity of supply, understanding that it involves responsiveness of quantity supplied to a change in price along a given supply curve. • Calculate PES using the following equation. $PES = \frac{percentage\ change\ in\ quantity\ supplied}{percentage\ change\ in\ price}$ • Explain, using diagrams and PES values, the concepts of elastic supply, inelastic supply, unit elastic supply, perfectly elastic supply and perfectly inelastic supply. • Explain the determinants of PES, including time, mobility of factors of production, unused capacity and ability to store stocks.	
Applications of price elasticity of supply	• Explain why the PES for primary commodities is relatively low and the PES for manufactured products is relatively high.	

1.3 Government intervention

Sub-topic	SL/HL core	HL
Indirect taxes		
Specific (fixed amount) taxes and *ad valorem* (percentage) taxes and their impact on markets	• Explain why governments impose indirect (excise) taxes. • Distinguish between specific and *ad valorem* taxes. • Draw diagrams to show specific and *ad valorem* taxes, and analyse their impacts on market outcomes. • Discuss the consequences of imposing an indirect tax on the stakeholders in a market, including consumers, producers and the government.	
Tax incidence and price elasticity of demand and supply		• Explain, using diagrams, how the incidence of indirect taxes on consumers and firms differs, depending on the price elasticity of demand and on the price elasticity of supply. • Plot demand and supply curves for a product from linear functions and then illustrate and/or calculate the effects of the imposition of a specific tax on the market (on price, quantity, consumer expenditure, producer revenue, government revenue, consumer surplus and producer surplus).
Subsidies		
Impact on markets	• Explain why governments provide subsidies, and describe examples of subsidies. • Draw a diagram to show a subsidy, and analyse the impacts of a subsidy on market outcomes. • Discuss the consequences of providing a subsidy on the stakeholders in a market, including consumers, producers and the government.	• Plot demand and supply curves for a product from linear functions and then illustrate and/or calculate the effects of the provision of a subsidy on the market (on price, quantity, consumer expenditure, producer revenue, government expenditure, consumer surplus and producer surplus).

Sub-topic	SL/HL core	HL
Price controls		
Price ceilings (maximum prices): rationale, consequences and examples	• Explain why governments impose price ceilings, and describe examples of price ceilings, including food price controls and rent controls. • Draw a diagram to show a price ceiling, and analyse the impacts of a price ceiling on market outcomes. • Examine the possible consequences of a price ceiling, including shortages, inefficient resource allocation, welfare impacts, underground parallel markets and non-price rationing mechanisms. • Discuss the consequences of imposing a price ceiling on the stakeholders in a market, including consumers, producers and the government.	• Calculate possible effects from the price ceiling diagram, including the resulting shortage and the change in consumer expenditure (which is equal to the change in firm revenue).
Price floors (minimum prices): rationale, consequences and examples	• Explain why governments impose price floors, and describe examples of price floors, including price support for agricultural products and minimum wages. • Draw a diagram of a price floor, and analyse the impacts of a price floor on market outcomes. • Examine the possible consequences of a price floor, including surpluses and government measures to dispose of the surpluses, inefficient resource allocation and welfare impacts. • Discuss the consequences of imposing a price floor on the stakeholders in a market, including consumers, producers and the government.	• Calculate possible effects from the price floor diagram, including the resulting surplus, the change in consumer expenditure, the change in producer revenue, and government expenditure to purchase the surplus.

Theory of knowledge: potential connections

In what sense are we morally obliged to pay taxes? Is this the result of a promise that we have made ourselves? When was this promise made? (Make a distinction here between moral and legal obligations.)

To what extent is government morally obliged to provide healthcare and welfare benefits to the unemployed?

1.4 Market failure

Sub-topic	SL/HL core	HL
The meaning of market failure		
Market failure as a failure to allocate resources efficiently	• Examine the concept of market failure as a failure of the market to achieve allocative efficiency, resulting in an over-allocation of resources (over-provision of a good) or an under-allocation of resources (under-provision of a good)	
Types of market failure		
The meaning of externalities	• Explain the concepts of marginal private benefits (MPB), marginal social benefits (MSB), marginal private costs (MPC) and marginal social costs (MSC). • Describe the meaning of externalities as the failure of the market to achieve a social optimum where MSB = MSC.	
Negative externalities of production and consumption	• Explain, using diagrams and examples, the concepts of negative externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service. • Explain that demerit goods are goods whose consumption creates external costs.	

Sub-topic	SL/HL core	HL
	• Evaluate, using diagrams, the use of policy responses, including market-based policies (taxation and tradable permits), and government regulations, to the problem of negative externalities of production and consumption	
Positive externalities of production and consumption	• Explain, using diagrams and examples, the concepts of positive externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service. • Explain that merit goods are goods whose consumption creates external benefits. • Evaluate, using diagrams, the use of government responses, including subsidies, legislation, advertising to influence behaviour, and direct provision of goods and services.	
Lack of public goods	• Using the concepts of rivalry and excludability, and providing examples, distinguish between public goods (non-rivalrous and non-excludable) and private goods (rivalrous and excludable). • Explain, with reference to the free rider problem, how the lack of public goods indicates market failure. • Discuss the implications of the direct provision of public goods by government.	

Sub-topic	SL/HL core	HL
Common access resources and the threat to sustainability	• Explain, using examples, common access resources. • Apply the concept of sustainability to the problem of common access resources. • Examine the consequences of the lack of a pricing mechanism for common access resources in terms of goods being overused/depleted/degraded as a result of activities of producers and consumers who do not pay for the resources that they use, and that this poses a threat to sustainability. • Discuss, using negative externalities diagrams, the view that economic activity requiring the use of fossil fuels to satisfy demand poses a threat to sustainability. • Discuss the view that the existence of poverty in economically less developed countries creates negative externalities through over-exploitation of land for agriculture, and that this poses a threat to sustainability. • Evaluate, using diagrams, possible government responses to threats to sustainability, including legislation, carbon taxes, cap and trade schemes, and funding for clean technologies. • Explain, using examples, that government responses to threats to sustainability are limited by the global nature of the problems and the lack of ownership of common access resources, and that effective responses require international cooperation.	

Sub-topic	SL/HL core	HL
Asymmetric information		• Explain, using examples, that market failure may occur when one party in an economic transaction (either the buyer or the seller) possesses more information than the other party. • Evaluate possible government responses, including legislation, regulation and provision of information.
Abuse of monopoly power		• Explain how monopoly power can create a welfare loss and is therefore a type of market failure. • Discuss possible government responses, including legislation, regulation, nationalization and trade liberalization.

Theory of knowledge: potential connections

To what extent is the obligation to seek sustainable modes of consumption a moral one?

What knowledge issues are involved in assessing the role of technology in meeting future patterns of consumption and decreasing the negative externalities of consumption associated with fossil fuels?

What are the knowledge issues involved in determining what is a rational cost to pay for halting climate change?

How could we know if economically more developed countries are morally justified in interfering in the development of economically less developed countries on the grounds of climate change?

How can we know when climate change is sufficiently serious to warrant government interfering in the freedom of its citizens to consume?

How can we calculate the external costs of producing and running items such as light bulbs or motor vehicles? For example, low energy light bulbs consume less energy but they require more energy to produce, and some brands contain materials that are harmful to the environment such as mercury. Hybrid cars consume less energy to run but consume more energy to produce.

What are the problems in knowing whether climate change is produced by human activity?

1.5 Theory of the firm and market structures (HL only)

Sub-topic	SL/HL core	HL
Production and costs		
Production in the short run: the law of diminishing returns		• Distinguish between the short run and long run in the context of production. • Define total product, average product and marginal product, and construct diagrams to show their relationship. • Explain the law of diminishing returns. • Calculate total, average and marginal product from a set of data and/or diagrams.
Costs of production: economic costs		• Explain the meaning of economic costs as the opportunity cost of all resources employed by the firm (including entrepreneurship). • Distinguish between explicit costs and implicit costs as the two components of economic costs.
Costs of production in the short run		• Explain the distinction between the short run and the long run, with reference to fixed factors and variable factors. • Distinguish between total costs, marginal costs and average costs. • Draw diagrams illustrating the relationship between marginal costs and average costs, and explain the connection with production in the short run.

Sub-topic	SL/HL core	HL
		• Explain the relationship between the product curves (average product and marginal product) and the cost curves (average variable cost and marginal cost), with reference to the law of diminishing returns. • Calculate total fixed costs, total variable costs, total costs, average fixed costs, average variable costs, average total costs and marginal costs from a set of data and/or diagrams.
Production in the long run: returns to scale		• Distinguish between increasing returns to scale, decreasing returns to scale and constant returns to scale.
Costs of production in the long run		• Explain the relationship between short-run average costs and long-run average costs. • Explain, using a diagram, the reason for the shape of the long-run average total cost curve. • Explain factors giving rise to economies of scale, including specialization, efficiency, marketing and indivisibilities. • Explain factors giving rise to diseconomies of scale, including problems of coordination and communication.
Revenues		
Total revenue, average revenue and marginal revenue		• Distinguish between total revenue, average revenue and marginal revenue. • Draw diagrams illustrating the relationship between total revenue, average revenue and marginal revenue. • Calculate total revenue, average revenue and marginal revenue from a set of data and/or diagrams.

Sub-topic	SL/HL core	HL
Profit		
Economic profit (sometimes known as abnormal profit) and normal profit (zero economic profit occurring at the break-even point)		• Describe economic profit (abnormal profit) as the case where total revenue exceeds economic cost. • Explain the concept of normal profit (zero economic profit) as the amount of revenue needed to cover the costs of employing self-owned resources (implicit costs, including entrepreneurship) or the amount of revenue needed to just keep the firm in business. • Explain that economic profit (abnormal profit) is profit over and above normal profit (zero economic profit), and that the firm earns normal profit when economic profit (abnormal profit) is zero. • Explain why a firm will continue to operate even when it earns zero economic profit (abnormal profit). • Explain the meaning of loss as negative economic profit arising when total revenue is less than total cost. • Calculate different profit levels from a set of data and/or diagrams.
Goals of firms		
Profit maximization		• Explain the goal of profit maximization where the difference between total revenue and total cost is maximized or where marginal revenue equals marginal cost.
Alternative goals of firms		• Explain alternative goals of firms, including revenue maximization, growth maximization, satisficing and corporate social responsibility.

Sub-topic	SL/HL core	HL
Perfect competition		
Assumptions of the model		• Describe, using examples, the assumed characteristics of perfect competition: a large number of firms; a homogeneous product; freedom of entry and exit; perfect information; perfect resource mobility.
Revenue curves		• Explain, using a diagram, the shape of the perfectly competitive firm's average revenue and marginal revenue curves, indicating that the assumptions of perfect competition imply that each firm is a price taker. • Explain, using a diagram, that the perfectly competitive firm's average revenue and marginal revenue curves are derived from market equilibrium for the industry.
Profit maximization in the short run		• Explain, using diagrams, that it is possible for a perfectly competitive firm to make economic profit (abnormal profit), normal profit (zero economic profit) or negative economic profit in the short run based on the marginal cost and marginal revenue profit maximization rule.
Profit maximization in the long run		• Explain, using a diagram, why, in the long run, a perfectly competitive firm will make normal profit (zero economic profit). • Explain, using a diagram, how a perfectly competitive market will move from short-run equilibrium to long-run equilibrium.

Sub-topic	SL/HL core	HL
Shut-down price and break-even price		• Distinguish between the short run shut-down price and the break-even price. • Explain, using a diagram, when a loss-making firm would shut down in the short run. • Explain, using a diagram, when a loss-making firm would shut down and exit the market in the long run. • Calculate the short run shut-down price and the break-even price from a set of data
Efficiency		• Explain the meaning of the term allocative efficiency. • Explain that the condition for allocative efficiency is P = MC (or, with externalities, MSB = MSC). • Explain, using a diagram, why a perfectly competitive market leads to allocative efficiency in both the short run and the long run. • Explain the meaning of the term productive/technical efficiency. • Explain that the condition for productive efficiency is that production takes place at minimum average total cost. • Explain, using a diagram, why a perfectly competitive firm will be productively efficient in the long run, though not necessarily in the short run.
Monopoly		
Assumptions of the model		• Describe, using examples, the assumed characteristics of a monopoly: a single or dominant firm in the market; no close substitutes; significant barriers to entry.

Sub-topic	SL/HL core	HL
Barriers to entry		• Explain, using examples, barriers to entry, including economies of scale, branding and legal barriers.
Revenue curves		• Explain that the average revenue curve for a monopolist is the market demand curve, which will be downward sloping. • Explain, using a diagram, the relationship between demand, average revenue and marginal revenue in a monopoly. • Explain why a monopolist will never choose to operate on the inelastic portion of its average revenue curve.
Profit maximization		• Explain, using a diagram, the short- and long-run equilibrium output and pricing decision of a profit maximizing (loss minimizing) monopolist, identifying the firm's economic profit (abnormal profit), or losses. • Examine the role of barriers to entry in permitting the firm to earn economic profit (abnormal profit).
Revenue maximization		• Explain, using a diagram, the output and pricing decision of a revenue maximizing monopoly firm. • Compare and contrast, using a diagram, the equilibrium positions of a profit maximizing monopoly firm and a revenue maximizing monopoly firm. • Calculate from a set of data and/or diagrams the revenue maximizing level of output.

Sub-topic	SL/HL core	HL
Natural monopoly		• With reference to economies of scale, and using examples, explain the meaning of the term "natural monopoly". • Draw a diagram illustrating a natural monopoly.
Monopoly and efficiency		• Explain, using diagrams, why the profit maximizing choices of a monopoly firm lead to allocative inefficiency (welfare loss) and productive inefficiency. • Evaluate reasons why, despite inefficiencies, a monopoly may be considered desirable for a variety of reasons, including the ability to finance research and development (R&D) from economic profits, the need to innovate to maintain economic profit (abnormal profit), and the possibility of economies of scale.
Policies to regulate monopoly power		• Evaluate the role of legislation and regulation in reducing monopoly power.
The advantages and disadvantages of monopoly compared with perfect competition		• Draw diagrams and use them to compare and contrast a monopoly market with a perfectly competitive market, with reference to factors including efficiency, price and output, research and development (R&D) and economies of scale.
Monopolistic competition		
Assumptions of the model		• Describe, using examples, the assumed characteristics of a monopolistic competition: a large number of firms; differentiated products; absence of barriers to entry and exit.

Sub-topic	SL/HL core	HL
Revenue curves		• Explain that product differentiation leads to a small degree of monopoly power and therefore to a negatively sloping demand curve for the product.
Profit maximization in the short run		• Explain, using a diagram, the short-run equilibrium output and pricing decisions of a profit maximizing (loss minimizing) firm in monopolistic competition, identifying the firm's economic profit (or loss).
Profit maximization in the long run		• Explain, using diagrams, why in the long run a firm in monopolistic competition will make normal profit.
Non-price competition		• Distinguish between price competition and non-price competition. • Describe examples of non-price competition, including advertising, packaging, product development and quality of service.
Monopolistic competition and efficiency		• Explain, using a diagram, why neither allocative efficiency nor productive efficiency are achieved by monopolistically competitive firms.
Monopolistic competition compared with perfect competition and monopoly		• Compare and contrast, using diagrams, monopolistic competition with perfect competition, and monopolistic competition with monopoly, with reference to factors including short run, long run, market power, allocative and productive efficiency, number of producers, economies of scale, ease of entry and exit, size of firms and product differentiation.

Sub-topic	SL/HL core	HL
Oligopoly		
Assumptions of the model		• Describe, using examples, the assumed characteristics of an oligopoly: the dominance of the industry by a small number of firms; the importance of interdependence; differentiated or homogeneous products; high barriers to entry. • Discuss the role of interdependence in the dilemma faced by oligopolistic firms—whether to compete or to collude. • Explain how a concentration ratio may be used to identify an oligopoly.
Game theory		• Explain how game theory (the simple prisoner's dilemma) can illustrate strategic interdependence and the options available to oligopolies.
Open/formal collusion		• Explain the term "collusion", give examples, and state that it is usually (in most countries) illegal. • Explain the term "cartel". • Explain that the primary goal of a cartel is to limit competition between member firms and to maximize joint profits as if the firms were collectively a monopoly. • Explain the incentive of cartel members to cheat. • Examine the conditions that make cartel structures difficult to maintain.
Tacit/informal collusion		• Explain the term "tacit collusion", including reference to price leadership by a dominant firm.

Sub-topic	SL/HL core	HL
Non-collusive oligopoly		• Explain that the behaviour of firms in a non-collusive oligopoly is strategic in order to take account of possible actions by rivals. • Explain, using a diagram, the existence of price rigidities, with reference to the kinked demand curve. • Explain why non-price competition is common in oligopolistic markets, with reference to the risk of price wars. • Describe, using examples, types of non-price competition.
Price discrimination		
Necessary conditions for the practice of price discrimination		• Describe price discrimination as the practice of charging different prices to different consumer groups for the same product, where the price difference is not justified by differences in cost.
		• Explain that price discrimination may only take place if all of the following conditions exist: the firm must possess some degree of market power; there must be groups of consumers with differing price elasticities of demand for the product; the firm must be able to separate groups to ensure that no resale of the product occurs. • Draw a diagram to illustrate how a firm maximizes profit in third degree price discrimination, explaining why the higher price is set in the market with the relatively more inelastic demand.

Theory of knowledge: potential connections

Is it rational to take into account costs already incurred in deciding whether a business venture should be terminated or whether it should receive more funds?

How can we know how to determine the balance of government policy between promoting competition in the interest of the consumer and allowing profitability in the interest of firms?

Section 2: Macroeconomics

2.1 The level of overall economic activity

Sub-topic	SL/HL core	HL
Economic activity		
The circular flow of income model	• Explain, using a diagram, the circular flow of income between households and firms in a closed economy with no government. • Identify the four factors of production and their respective payments (rent, wages, interest and profit) and explain that these constitute the income flow in the model.	
	• Outline that the income flow is numerically equivalent to the expenditure flow and the value of output flow. • Explain, using a diagram, the circular flow of income in an open economy with government and financial markets, referring to leakages/withdrawals (savings, taxes and import expenditure) and injections (investment, government expenditure and export revenue). • Explain how the size of the circular flow will change depending on the relative size of injections and leakages.	

Sub-topic	SL/HL core	HL
Measures of economic activity: gross domestic product (GDP), and gross national product (GNP) or gross national income (GNI)	• Distinguish between GDP and GNP/GNI as measures of economic activity. • Distinguish between the nominal value of GDP and GNP/GNI and the real value of GDP and GNP/GNI. • Distinguish between total GDP and GNP/GNI and per capita GDP and GNP/GNI. • Examine the output approach, the income approach and the expenditure approach when measuring national income. • Evaluate the use of national income statistics, including their use for making comparisons over time, their use for making comparisons between countries and their use for making conclusions about standards of living. • Explain the meaning and significance of "green GDP", a measure of GDP that accounts for environmental destruction.	• Calculate nominal GDP from sets of national income data, using the expenditure approach. • Calculate GNP/GNI from data • Calculate real GDP, using a price deflator.
The business cycle		
Short-term fluctuations and long-term trend	• Explain, using a business cycle diagram, that economies typically tend to go through a cyclical pattern characterized by the phases of the business cycle. • Explain the long-term growth trend in the business cycle diagram as the potential output of the economy. • Distinguish between a decrease in GDP and a decrease in GDP growth.	

Theory of knowledge: potential connections
What is the empirical evidence for the existence of the business cycle? How do we decide whether this evidence is sufficient?

2.2 Aggregate demand and aggregate supply

Sub-topic	SL/HL core	HL
Aggregate demand (AD)		
The AD curve	• Distinguish between the microeconomic concept of demand for a product and the macroeconomic concept of aggregate demand. • Construct an aggregate demand curve. • Explain why the AD curve has a negative slope.	
The components of AD	• Describe consumption, investment, government spending and net exports as the components of aggregate demand.	
The determinants of AD or causes of shifts in the AD curve	• Explain how the AD curve can be shifted by changes in consumption due to factors including changes in consumer confidence, interest rates, wealth, personal income taxes (and hence disposable income) and level of household indebtedness. • Explain how the AD curve can be shifted by changes in investment due to factors including interest rates, business confidence, technology, business taxes and the level of corporate indebtedness. • Explain how the AD curve can be shifted by changes in government spending due to factors including political and economic priorities. • Explain how the AD curve can be shifted by changes in net exports due to factors including the income of trading partners, exchange rates and changes in the level of protectionism.	

Sub-topic	SL/HL core	HL
Aggregate supply (AS)		
The meaning of aggregate supply	• Define the term aggregate supply. • Explain, using a diagram, why the short-run aggregate supply curve (SRAS curve) is upward sloping. • Explain, using a diagram, how the AS curve in the short run (SRAS) can shift due to factors including changes in resource prices, changes in business taxes and subsidies and supply shocks.	
Alternative views of aggregate supply	• Explain, using a diagram, that the monetarist/new classical model of the long-run aggregate supply curve (LRAS) is vertical at the level of potential output (full employment output) because aggregate supply in the long run is independent of the price level. • Explain, using a diagram, that the Keynesian model of the aggregate supply curve has three sections because of "wage/price" downward inflexibility and different levels of spare capacity in the economy.	
Shifting the aggregate supply curve over the long term	• Compare and contrast, using the two models above, the ways that factors leading to changes in the quantity and/or quality of factors of production (including improvements in efficiency, new technology, reductions in unemployment, and institutional changes) can shift the aggregate supply curve over the long term.	

Sub-topic	SL/HL core	HL
Equilibrium		
Short-run equilibrium	• Explain, using a diagram, the determination of short-run equilibrium, using the SRAS curve. • Examine, using diagrams, the impacts of changes in short-run equilibrium.	
Equilibrium in the monetarist/new classical model	• Explain, using a diagram, the determination of long-run equilibrium, indicating that long-run equilibrium occurs at the full employment level of output. • Examine why, in the monetarist/new classical approach, while there may be short-term fluctuations in output, the economy will always return to the full employment level of output in the long run. • Examine, using diagrams, the impacts of changes in the long-run equilibrium.	

Sub-topic	SL/HL core	HL
Equilibrium in the Keynesian model	• Explain, using the Keynesian AD/AS diagram, that the economy may be in equilibrium at any level of real output where AD intersects AS. • Explain, using a diagram, that if the economy is in equilibrium at a level of real output below the full employment level of output, then there is a deflationary (recessionary) gap. • Discuss why, in contrast to the monetarist/new classical model, the economy can remain stuck in a deflationary (recessionary) gap in the Keynesian model. • Explain, using a diagram, that if AD increases in the vertical section of the AS curve, then there is an inflationary gap. • Discuss why, in contrast to the monetarist/new classical model, increases in aggregate demand in the Keynesian AD/AS model need not be inflationary, unless the economy is operating close to, or at, the level of full employment.	

Sub-topic	SL/HL core	HL
The Keynesian multiplier		
The nature of the Keynesian multiplier		• Explain, with reference to the concepts of leakages (withdrawals) and injections, the nature and importance of the Keynesian multiplier. • Calculate the multiplier using either of the following formulae. $\frac{1}{(1-MPC)}$ $\frac{1}{(MPS+MPT+MPM)}$ • Use the multiplier to calculate the effect on GDP of a change in an injection in investment, government spending or exports. • Draw a Keynesian AD/AS diagram to show the impact of the multiplier.

Theory of knowledge: potential connections

Business confidence is a contributing factor to the level of AD. What knowledge issues arise in attempting to measure business confidence?

The Keynesian and Monetarist positions differ on the shape of the AS curve. What is needed to settle this question: empirical evidence (if so, what should be measured?), strength of theoretical argument, or factors external to economics such as political conviction?

2.3 Macroeconomic objectives

Sub-topic	SL/HL core	HL
Low unemployment		
The meaning of unemployment	• Define the term unemployment. • Explain how the unemployment rate is calculated. • Explain the difficulties in measuring unemployment, including the existence of hidden unemployment, the existence of underemployment, and the fact that it is an average and therefore ignores regional, ethnic, age and gender disparities.	• Calculate the unemployment rate from a set of data.
Consequences of unemployment	• Discuss possible economic consequences of unemployment, including a loss of GDP, loss of tax revenue, increased cost of unemployment benefits, loss of income for individuals, and greater disparities in the distribution of income. • Discuss possible personal and social consequences of unemployment, including increased crime rates, increased stress levels, increased indebtedness, homelessness and family breakdown.	
Types and causes of unemployment	• Describe, using examples, the meaning of frictional, structural, seasonal and cyclical (demand-deficient) unemployment. • Distinguish between the causes of frictional, structural, seasonal and cyclical (demand-deficient) unemployment.	

Sub-topic	SL/HL core	HL
	• Explain, using a diagram, that cyclical unemployment is caused by a fall in aggregate demand. • Explain, using a diagram, that structural unemployment is caused by changes in the demand for particular labour skills, changes in the geographical location of industries, and labour market rigidities. • Evaluate government policies to deal with the different types of unemployment.	
Low and stable rate of inflation		
The meaning of inflation, disinflation and deflation	• Distinguish between inflation, disinflation and deflation. • Explain that inflation and deflation are typically measured by calculating a consumer price index (CPI), which measures the change in prices of a basket of goods and services consumed by the average household. • Explain that different income earners may experience a different rate of inflation when their pattern of consumption is not accurately reflected by the CPI. • Explain that inflation figures may not accurately reflect changes in consumption patterns and the quality of the products purchased. • Explain that economists measure a core/underlying rate of inflation to eliminate the effect of sudden swings in the prices of food and oil, for example. • Explain that a producer price index measuring changes in the prices of factors of production may be useful in predicting future inflation.	• Construct a weighted price index, using a set of data provided. • Calculate the inflation rate from a set of data.

Sub-topic	SL/HL core	HL
Consequences of inflation	• Discuss the possible consequences of a high inflation rate, including greater uncertainty, redistributive effects, less saving, and the damage to export competitiveness.	
Consequences of deflation	• Discuss the possible consequences of deflation, including high levels of cyclical unemployment and bankruptcies.	
Types and causes of inflation	• Explain, using a diagram, that demand-pull inflation is caused by changes in the determinants of AD, resulting in an increase in AD. • Explain, using a diagram, that cost-push inflation is caused by an increase in the costs of factors of production, resulting in a decrease in SRAS. • Evaluate government policies to deal with the different types of inflation.	
Possible relationships between unemployment and inflation		• Discuss, using a short-run Phillips curve diagram, the view that there is a possible trade-off between the unemployment rate and the inflation rate in the short run. • Explain, using a diagram, that the short-run Phillips curve may shift outwards, resulting in stagflation (caused by a decrease in SRAS due to factors including supply shocks).

Sub-topic	SL/HL core	HL
		• Discuss, using a diagram, the view that there is a long-run Phillips curve that is vertical at the natural rate of unemployment and therefore there is no trade-off between the unemployment rate and the inflation rate in the long run. • Explain that the natural rate of unemployment is the rate of unemployment that exists when the economy is producing at the full employment level of output.
Economic growth		
The meaning of economic growth	• Define economic growth as an increase in real GDP.	• Calculate the rate of economic growth from a set of data.
Causes of economic growth	• Explain, using a production possibilities curve (PPC) diagram, economic growth as an increase in actual output resulting from factors such as the utilization of unemployed resources and increases in productive efficiency, leading to a movement of a point inside the PPC to a point closer to the PPC. • Explain, using a PPC diagram, economic growth as an increase in production possibilities caused by factors including increases in the quantity and quality of resources, leading to outward PPC shifts. • Explain, using an LRAS diagram, economic growth as an increase in potential output caused by factors including increases in the quantity and quality of resources, leading to a rightward shift of the LRAS curve. • Evaluate the view that increased investment is essential to achieve economic growth. • Evaluate the view that improved productivity is essential to achieve economic growth.	

Sub-topic	SL/HL core	HL
Consequences of economic growth	• Discuss the possible consequences of economic growth, including the possible impacts on living standards, unemployment, inflation, the distribution of income, the current account of the balance of payments, and sustainability.	
Equity in the distribution of income		
The meaning of equity in the distribution of income	• Explain the difference between equity in the distribution of income and equality in the distribution of income. • Explain that due to unequal ownership of factors of production, the market system may not result in an equitable distribution of income.	
Indicators of income equality/inequality	• Analyse data on relative income shares of given percentages of the population, including deciles and quintiles. • Draw a Lorenz curve and explain its significance. • Explain how the Gini coefficient is derived and interpreted.	
Poverty	• Distinguish between absolute poverty and relative poverty. • Explain possible causes of poverty, including low incomes, unemployment and lack of human capital. • Explain possible consequences of poverty, including low living standards, and lack of access to health care and education.	

Sub-topic	SL/HL core	HL
The role of taxation in promoting equity	• Distinguish between direct and indirect taxes, providing examples of each, and explain that direct taxes may be used as a mechanism to redistribute income. • Distinguish between progressive, regressive and proportional taxation, providing examples of each.	• Calculate the marginal rate of tax and the average rate of tax from a set of data.
Other measures to promote equity	• Explain that governments undertake expenditures to provide directly, or to subsidize, a variety of socially desirable goods and services (including health care services, education, and infrastructure that includes sanitation and clean water supplies), thereby making them available to those on low incomes. • Explain the term transfer payments, and provide examples, including old age pensions, unemployment benefits and child allowances.	
The relationship between equity and efficiency	• Evaluate government policies to promote equity (taxation, government expenditure and transfer payments) in terms of their potential positive or negative effects on efficiency in the allocation of resources.	

Theory of knowledge: potential connections

What criteria can be used to order macroeconomic objectives in terms of priority? Are such criteria external to economics (that is, normative)?

Is economic growth always beneficial? What could be meant by the word "beneficial"?

Is there always a cost to economic growth?

The notion of fairness can be approached from a number of perspectives—equality of opportunity, maximizing the income of the least well-off group, and absolute equality of income. Which of these notions seems to be most attractive? Why? Examine what each of these perspectives suggests is a fair distribution of income.

Equality of opportunity implies correcting for social advantage (for example, government might devote more resources to the education of a child brought up in less prosperous circumstances than one brought up in a comfortable home whose parents are university lecturers). How far should the state go in making such corrections? Should all parents be forced to read to their children so that no child should be at a disadvantage? Should the state attempt to correct for the uneven distribution of natural abilities such as IQ (intelligence quotient) by devoting proportionally more resources to children of less than average IQ.

2.4 Fiscal policy

Sub-topic	SL/HL core	HL
The government budget		
Sources of government revenue	• Explain that the government earns revenue primarily from taxes (direct and indirect), as well as from the sale of goods and services and the sale of state-owned (government-owned) enterprises.	
Types of government expenditures	• Explain that government spending can be classified into current expenditures, capital expenditures and transfer payments, providing examples of each.	
The budget outcome	• Distinguish between a budget deficit, a budget surplus and a balanced budget. • Explain the relationship between budget deficits/surpluses and the public (government) debt.	

Sub-topic	SL/HL core	HL
The role of fiscal policy		
Fiscal policy and short-term demand management	• Explain how changes in the level of government expenditure and/or taxes can influence the level of aggregate demand in an economy. • Explain the mechanism through which expansionary fiscal policy can help an economy close a deflationary (recessionary) gap. • Construct a diagram to show the potential effects of expansionary fiscal policy, outlining the importance of the shape of the aggregate supply curve. • Explain the mechanism through which contractionary fiscal policy can help an economy close an inflationary gap. • Construct a diagram to show the potential effects of contractionary fiscal policy, outlining the importance of the shape of the aggregate supply curve.	
The impact of automatic stabilizers	• Explain how factors including the progressive tax system and unemployment benefits, which are influenced by the level of economic activity and national income, automatically help stabilize short-term fluctuations.	
Fiscal policy and its impact on potential output	• Evaluate the view that fiscal policy can be used to promote long-term economic growth (increases in potential output) indirectly by creating an economic environment that is favourable to private investment, and directly through government spending on physical capital goods and human capital formation, as well as provision of incentives for firms to invest.	

Sub-topic	SL/HL core	HL
Evaluation of fiscal policy	• Evaluate the effectiveness of fiscal policy through consideration of factors including the ability to target sectors of the economy, the direct impact on aggregate demand, the effectiveness of promoting economic activity in a recession, time lags, political constraints, crowding out, and the inability to deal with supply-side causes of instability.	

Theory of knowledge: potential connections
In one sense the imposition of taxes by government on individuals amounts to a restriction of individual freedom. How can we know when such government interference in individual freedom is justified?

2.5 Monetary policy

Sub-topic	SL/HL core	HL
Interest rates		
Interest rate determination and the role of a central bank	• Describe the role of central banks as regulators of commercial banks and bankers to governments. • Explain that central banks are usually made responsible for interest rates and exchange rates in order to achieve macroeconomic objectives.	
	• Explain, using a demand and supply of money diagram, how equilibrium interest rates are determined, outlining the role of the central bank in influencing the supply of money.	

Sub-topic	SL/HL core	HL
The role of monetary policy		
Monetary policy and short-term demand management	• Explain how changes in interest rates can influence the level of aggregate demand in an economy. • Explain the mechanism through which easy (expansionary) monetary policy can help an economy close a deflationary (recessionary) gap. • Construct a diagram to show the potential effects of easy (expansionary) monetary policy, outlining the importance of the shape of the aggregate supply curve. • Explain the mechanism through which tight (contractionary) monetary policy can help an economy close an inflationary gap. • Construct a diagram to show the potential effects of tight (contractionary) monetary policy, outlining the importance of the shape of the aggregate supply curve.	
Monetary policy and inflation targeting	• Explain that central banks of certain countries, rather than focusing on the maintenance of both full employment and a low rate of inflation, are guided in their monetary policy by the objective to achieve an explicit or implicit inflation rate target.	

Sub-topic	SL/HL core	HL
Evaluation of monetary policy	• Evaluate the effectiveness of monetary policy through consideration of factors including the independence of the central bank, the ability to adjust interest rates incrementally, the ability to implement changes in interest rates relatively quickly, time lags, limited effectiveness in increasing aggregate demand if the economy is in deep recession and conflict among government economic objectives.	

2.6 Supply-side policies

Sub-topic	SL/HL core	HL
The role of supply-side policies		
Supply-side policies and the economy	• Explain that supply-side policies aim at positively affecting the production side of an economy by improving the institutional framework and the capacity to produce (that is, by changing the quantity and/or quality of factors of production). • State that supply-side policies may be market-based or interventionist, and that in either case they aim to shift the LRAS curve to the right, achieving growth in potential output.	
Interventionist supply-side policies		
Investment in human capital	• Explain how investment in education and training will raise the levels of human capital and have a short-term impact on aggregate demand, but more importantly will increase LRAS.	

Sub-topic	SL/HL core	HL
Investment in new technology	• Explain how policies that encourage research and development will have a short-term impact on aggregate demand, but more importantly will result in new technologies and will increase LRAS.	
Investment in infrastructure	• Explain how increased and improved infrastructure will have a short-term impact on aggregate demand, but more importantly will increase LRAS.	
Industrial policies	• Explain that targeting specific industries through policies including tax cuts, tax allowances and subsidized lending promotes growth in key areas of the economy and will have a short-term impact on aggregate demand but, more importantly, will increase LRAS.	
Market-based supply-side policies		
Policies to encourage competition	• Explain how factors including deregulation, privatization, trade liberalization and anti-monopoly regulation are used to encourage competition.	
Labour market reforms	• Explain how factors including reducing the power of labour unions, reducing unemployment benefits and abolishing minimum wages are used to make the labour market more flexible (more responsive to supply and demand).	
Incentive-related policies	• Explain how factors including personal income tax cuts are used to increase the incentive to work, and how cuts in business tax and capital gains tax are used to increase the incentive to invest.	

Sub-topic	SL/HL core	HL
Evaluation of supply-side policies		
The strengths and weaknesses of supply-side policies	• Evaluate the effectiveness of supply-side policies through consideration of factors including time lags, the ability to create employment, the ability to reduce inflationary pressure, the impact on economic growth, the impact on the government budget, the effect on equity, and the effect on the environment.	

Theory of knowledge: potential connections

How can we know whether government should support pure research, which might contribute to the sum total of human knowledge but which might never have an impact on technology? What other knowledge issues are relevant to investment in pure research?

Investment in education and training is a common supply-side policy. What other reasons could there be for supporting the education of the population? What knowledge issues arise in answering the question as to whether government should shoulder this responsibility or whether it should be left to the market?

Section 3: International economics

3.1 International trade

Sub-topic	SL/HL core	HL
Free trade		
The benefits of trade	• Explain that gains from trade include lower prices for consumers, greater choice for consumers, the ability of producers to benefit from economies of scale, the ability to acquire needed resources, a more efficient allocation of resources, increased competition, and a source of foreign exchange.	

Sub-topic	SL/HL core	HL
Absolute and comparative advantage		• Explain the theory of absolute advantage. • Explain, using a diagram, the gains from trade arising from a country's absolute advantage in the production of a good. • Explain the theory of comparative advantage. • Describe the sources of comparative advantage, including the differences between countries in factor endowments and the levels of technology. • Draw a diagram to show comparative advantage. • Calculate opportunity costs from a set of data in order to identify comparative advantage. • Draw a diagram to illustrate comparative advantage from a set of data. • Discuss the real-world relevance and limitations of the theory of comparative advantage, considering factors including the assumptions on which it rests, and the costs and benefits of specialization (a full discussion must take into account arguments in favour and against free trade and protection—see below).
The World Trade Organization (WTO)	• Describe the objectives and functions of the WTO.	
Restrictions on free trade: Trade protection		
Types of trade protection	• Explain, using a tariff diagram, the effects of imposing a tariff on imported goods on different stakeholders, including domestic producers, foreign producers, consumers and the government.	• Calculate from diagrams the effects of imposing a tariff on imported goods on different stakeholders, including domestic producers, foreign producers, consumers and the government.

Sub-topic	SL/HL core	HL
	• Explain, using a diagram, the effects of setting a quota on foreign producers on different stakeholders, including domestic producers, foreign producers, consumers and the government. • Explain, using a diagram, the effects of giving a subsidy to domestic producers on different stakeholders, including domestic producers, foreign producers, consumers and the government. • Describe administrative barriers that may be used as a means of protection. • Evaluate the effect of different types of trade protection.	• Calculate from diagrams the effects of setting a quota on foreign producers on different stakeholders, including domestic producers, foreign producers, consumers and the government. • Calculate from diagrams the effects of giving a subsidy to domestic producers on different stakeholders, including domestic producers, foreign producers, consumers and the government.
Arguments for and against trade protection (arguments against and for free trade)	• Discuss the arguments in favour of trade protection, including the protection of domestic jobs, national security, protection of infant industries, the maintenance of health, safety and environmental standards, anti-dumping and unfair competition, a means of overcoming a balance of payments deficit and a source of government revenue. • Discuss the arguments against trade protection, including a misallocation of resources, the danger of retaliation and "trade wars", the potential for corruption, increased costs of production due to lack of competition, higher prices for domestic consumers, increased costs of imported factors of production and reduced export competitiveness.	

Theory of knowledge: potential connections
Are there moral as well as economic arguments in favour of free trade?

3.2 Exchange rates

Sub-topic	SL/HL core	HL
Freely floating exchange rates		
Determination of freely floating exchange rates	• Explain that the value of an exchange rate in a floating system is determined by the demand for, and supply of, a currency. • Draw a diagram to show determination of exchange rates in a floating exchange rate system.	• Calculate the value of one currency in terms of another currency. • Calculate the exchange rate for linear demand and supply functions. • Plot demand and supply curves for a currency from linear functions and identify the equilibrium exchange rate. • Using exchange rates, calculate the price of a good in different currencies.
Causes of changes in the exchange rate	• Explain the factors that lead to changes in currency demand and supply, including foreign demand for a country's exports, domestic demand for imports, relative interest rates, relative inflation rates, investment from overseas in a country's firms (foreign direct investment and portfolio investment) and speculation. • Distinguish between a depreciation of the currency and an appreciation of the currency. • Draw diagrams to show changes in the demand for, and supply of, a currency.	• Calculate the changes in the value of a currency from a set of data.
The effects of exchange rate changes	• Evaluate the possible economic consequences of a change in the value of a currency, including the effects on a country's inflation rate, employment, economic growth and current account balance.	
Government intervention		
Fixed exchange rates	• Describe a fixed exchange rate system involving commitment to a single fixed rate. • Distinguish between a devaluation of a currency and a revaluation of a currency. • Explain, using a diagram, how a fixed exchange rate is maintained.	

Sub-topic	SL/HL core	HL
Managed exchange rates (managed float)	• Explain how a managed exchange rate operates, with reference to the fact that there is a periodic government intervention to influence the value of an exchange rate. • Examine the possible consequences of overvalued and undervalued currencies.	
Evaluation of different exchange rate systems	• Compare and contrast a fixed exchange rate system with a floating exchange rate system, with reference to factors including the degree of certainty for stakeholders, ease of adjustment, the role of international reserves in the form of foreign currencies and flexibility offered to policy makers.	

3.3 The balance of payments

Sub-topic	SL/HL core	HL
The structure of the balance of payments		
The meaning of the balance of payments	• Outline the role of the balance of payments. • Distinguish between debit items and credit items in the balance of payments.	
The components of the balance of payments accounts	• Explain the four components of the current account, specifically the balance of trade in goods, the balance of trade in services, income and current transfers. • Distinguish between a current account deficit and a current account surplus. • Explain the two components of the capital account, specifically capital transfers and transaction in non-produced, non-financial assets. • Explain the three main components of the financial account, specifically, direct investment, portfolio investment and reserve assets.	• Calculate elements of the balance of payments from a set of data.

Sub-topic	SL/HL core	HL
The relationships between the accounts	• Explain that the current account balance is equal to the sum of the capital account and financial account balances (see the appendix, "The balance of payments"). • Examine how the current account and the financial account are interdependent.	
Current account deficits		
The relationship between the current account and the exchange rate	• Explain why a deficit in the current account of the balance of payments may result in downward pressure on the exchange rate of the currency.	
Implications of a persistent current account deficit		• Discuss the implications of a persistent current account deficit, referring to factors including foreign ownership of domestic assets, exchange rates, interest rates, indebtedness, international credit ratings and demand management.
Methods to correct a persistent current account deficit		• Explain the methods that a government can use to correct a persistent current account deficit, including expenditure switching policies, expenditure reducing policies and supply-side policies, to increase competitiveness. • Evaluate the effectiveness of the policies to correct a persistent current account deficit.
The Marshall-Lerner condition and the J-curve effect		• State the Marshall-Lerner condition. • Apply the Marshall-Lerner condition to the effect of devaluation/depreciation on the current account. • Explain the J-curve effect, with reference to the Marshall-Lerner condition.

Sub-topic	SL/HL core	HL
Current account surpluses		
The relationship between the current account and the exchange rate	• Explain why a surplus in the current account of the balance of payments may result in upward pressure on the exchange rate of the currency.	
Implications of a persistent current account surplus		• Discuss the possible consequences of a rising current account surplus, including lower domestic consumption and investment, as well as the appreciation of the domestic currency and reduced export competitiveness.

3.4 Economic integration

Sub-topic	SL/HL core	HL
Forms of economic integration		
Preferential trade agreements	• Distinguish between bilateral and multilateral (WTO) trade agreements. • Explain that preferential trade agreements give preferential access to certain products from certain countries by reducing or eliminating tariffs, or by other agreements relating to trade.	
Trading blocs	• Distinguish between a free trade area, a customs union and a common market. • Explain that economic integration will increase competition among producers within the trading bloc. • Compare and contrast the different types of trading blocs.	• Explain the concepts of trade creation and trade diversion in a customs union. • Explain that different forms of economic integration allow member countries to gain from economies of scale.
Monetary union	• Explain that a monetary union is a common market with a common currency and a common central bank. • Discuss the possible advantages and disadvantages of a monetary union for its members.	

Theory of knowledge: potential connections

What criteria can be used to assess the benefits and the costs of increased economic integration?

Might increased economic integration ever be considered undesirable?

3.5 Terms of trade (HL only)

Sub-topic	SL/HL core	HL
The meaning of the terms of trade		
Measurement		• Explain the meaning of the terms of trade. • Explain how the terms of trade are measured. • Distinguish between an improvement and a deterioration in the terms of trade. • Calculate the terms of trade using the equation: Index of average export prices/index of average import prices x 100.
Causes of changes in the terms of trade		• Explain that the terms of trade may change in the short term due to changes in demand conditions for exports and imports, changes in global supply of key inputs (such as oil), changes in relative inflation rates and changes in relative exchange rates. • Explain that the terms of trade may change in the long term due to changes in world income levels, changes in productivity within the country and technological developments.
Consequences of changes in the terms of trade		• Explain how changes in the terms of trade in the long term may result in a global redistribution of income. • Examine the effects of changes in the terms of trade on a country's current account, using the concepts of price elasticity of demand for exports and imports.

Sub-topic	SL/HL core	HL
		• Examine the impacts of short-term fluctuations and long-term deterioration in the terms of trade of economically less developed countries that specialize in primary commodities, using the concepts of price elasticity of demand and supply for primary products and income elasticity of demand.

Section 4: Development economics

4.1 Economic development

Sub-topic	SL/HL core	HL
The nature of economic growth and economic development		
Economic growth and economic development	• Distinguish between economic growth and economic development. • Explain the multidimensional nature of economic development in terms of reducing widespread poverty, raising living standards, reducing income inequalities and increasing employment opportunities. • Explain that the most important sources of economic growth in economically less developed countries include increases in quantities of physical capital and human capital, the development and use of new technologies that are appropriate to the conditions of the economically less developed countries, and institutional changes.	

Sub-topic	SL/HL core	HL
	• Discuss the relationship between economic growth and economic development, noting that some limited economic development is possible in the absence of economic growth, but that over the long term economic growth is usually necessary for economic development (however, it should be understood that under certain circumstances economic growth may not lead to economic development).	
Common characteristics of economically less developed countries	• Explain, using examples, that economically less developed countries share certain common characteristics (noting that it is dangerous to generalize as there are many exceptions in each case), including low levels of GDP per capita, high levels of poverty, relatively large agricultural sectors, large urban informal sectors and high birth rates. • Explain that in some countries there may be communities caught in a poverty trap (poverty cycle) where poor communities are unable to invest in physical, human and natural capital due to low or no savings; poverty is therefore transmitted from generation to generation, and there is a need for intervention to break out of the cycle.	

Sub-topic	SL/HL core	HL
Diversity among economically less developed nations	• Explain, using examples, that economically less developed countries differ enormously from each other in terms of a variety of factors, including resource endowments, climate, history (colonial or otherwise), political systems and degree of political stability.	
International development goals	• Outline the current status of international development goals, including the Millennium Development Goals.	

Theory of knowledge: potential connections

What are the knowledge issues involved in compiling a list of development goals?

Does the term "economic development" mean different things in different cultures?

Are there two ways of thinking about economics: from the point of view of an economically more developed country or from that of an economically less developed country? If so, what is the difference? Are there two different sets of values in which such a distinction is grounded?

How can we decide if the distinction between economically more developed countries and economically less developed countries is a meaningful one given that economic development itself might not be so clearly defined?

4.2 Measuring development

Sub-topic	SL/HL core	HL
Measurement methods		
Single indicators	• Distinguish between GDP per capita figures and GNI per capita figures. • Compare and contrast the GDP per capita figures and the GNI per capita figures for economically more developed countries and economically less developed countries. • Distinguish between GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates.	

Sub-topic	SL/HL core	HL
	• Compare and contrast GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates for economically more developed countries and economically less developed countries. • Compare and contrast two health indicators for economically more developed countries and economically less developed countries. • Compare and contrast two education indicators for economically more developed countries and economically less developed countries.	
Composite indicators	• Explain that composite indicators include more than one measure and so are considered to be better indicators of economic development. • Explain the measures that make up the Human Development Index (HDI). • Compare and contrast the HDI figures for economically more developed countries and economically less developed countries. • Explain why a country's GDP/GNI per capita global ranking may be lower, or higher, than its HDI global ranking.	

Theory of knowledge: potential connections

What criteria could we use to determine whether a particular method for measuring development is effective?

What knowledge issues might be encountered in constructing a composite indicator to measure development?

4.3 The role of domestic factors

Sub-topic	SL/HL core	HL
Domestic factors and economic development		
Domestic factors	• With reference to a specific developing economy, and using appropriate diagrams where relevant, examine how the following factors contribute to economic development. a. Education and health b. The use of appropriate technology c. Access to credit and micro-credit d. The empowerment of women e. Income distribution	

4.4 The role of international trade

Sub-topic	SL/HL core	HL
International trade and economic development		
Trade problems facing many economically less developed countries	• With reference to specific examples, explain how the following factors are barriers to development for economically less developed countries. a. Over-specialization on a narrow range of products b. Price volatility of primary products c. Inability to access international markets	• With reference to specific examples, evaluate the following factor as a barrier to development for economically less developed countries. a. Long-term changes in the terms of trade

Sub-topic	SL/HL core	HL
Trade strategies for economic growth and economic development	• With reference to specific examples, evaluate each of the following as a means of achieving economic growth and economic development. a. Import substitution b. Export promotion c. Trade liberalization d. The role of the WTO e. Bilateral and regional preferential trade agreements f. Diversification	

4.5 The role of foreign direct investment (FDI)

Sub-topic	SL/HL core	HL
Foreign direct investment and multinational corporations (MNCs)		
The meaning of FDI and MNCs	• Describe the nature of foreign direct investment (FDI) and multinational corporations (MNCs). • Explain the reasons why MNCs expand into economically less developed countries. • Explain the characteristics of economically less developed countries that attract FDI, including low cost factor inputs, a regulatory framework that favours profit repatriation and favourable tax rules.	
Advantages and disadvantages of FDI for economically less developed countries	• Evaluate the impact of foreign direct investment (FDI) for economically less developed countries.	

4.6 The roles of foreign aid and multilateral development assistance

Sub-topic	SL/HL core	HL
Foreign aid		
Classifications and types of aid	• Explain that aid is extended to economically less developed countries either by governments of donor countries, in which case it is called official development assistance (ODA), or by non-governmental organizations (NGOs). • Explain that humanitarian aid consists of food aid, medical aid and emergency relief aid. • Explain that development aid consists of grants, concessional long-term loans, project aid that includes support for schools and hospitals, and programme aid that includes support for sectors such as the education sector and the financial sector. • Explain that, for the most part, the priority of NGOs is to provide aid on a small scale to achieve development objectives. • Explain that aid might also come in the form of tied aid. • Examine the motivations of economically more developed countries giving aid. • Compare and contrast the extent, nature and sources of ODA to two economically less developed countries.	
Evaluation of foreign aid	• Evaluate the effectiveness of foreign aid in contributing to economic development. • Compare and contrast the roles of aid and trade in economic development.	

Sub-topic	SL/HL core	HL
Multilateral development assistance		
The roles of the International Monetary Fund (IMF) and the World Bank	• Examine the current roles of the IMF and the World Bank in promoting economic development.	

4.7 The role of international debt

Sub-topic	SL/HL core	HL
Foreign debt		
Foreign debt and its consequences	• Outline the meaning of foreign debt and explain why countries borrow from foreign creditors. • Explain that in some cases countries have become heavily indebted, requiring rescheduling of the debt payments and/or conditional assistance from international organizations, including the IMF and the World Bank. • Explain why the servicing of international debt causes balance of payments problems and has an opportunity cost in terms of foregone spending on development objectives. • Explain that the burden of debt has led to pressure to cancel the debt of heavily indebted countries.	

Theory of knowledge: potential connections
For each factor, what would you consider to be sufficient evidence that it plays a role in enhancing or inhibiting development?

4.8 The balance between markets and intervention

Sub-topic	SL/HL core	HL
Strengths and weaknesses of market-oriented policies		
Strengths	• Discuss the positive outcomes of market-oriented policies (such as liberalized trade and capital flows, privatization and deregulation), including a more efficient allocation of resources and economic growth.	
Weaknesses	• Discuss the negative outcomes of market-oriented strategies, including market failure, the development of a dual economy and income inequalities.	
Strengths and weaknesses of interventionist policies		
Strengths	• Discuss the strengths of interventionist policies, including the provision of infrastructure, investment in human capital, the provision of a stable macroeconomic economy and the provision of a social safety net.	
Weaknesses	• Discuss the limitations of interventionist policies, including excessive bureaucracy, poor planning and corruption.	
Market with government intervention	• Explain the importance of good governance in the development process. • Discuss the view that economic development may best be achieved through a complementary approach, involving a balance of market oriented policies and government intervention.	

Theory of knowledge: potential connections

What criteria can economists use to decide on the balance between markets and intervention?

Is development economics dependent upon external normative notions such as what constitutes a good or fulfilled life?

Assessment in the Diploma Programme

General

Assessment is an integral part of teaching and learning. The most important aims of assessment in the Diploma Programme are that it should support curricular goals and encourage appropriate student learning. Both external and internal assessment are used in the Diploma Programme. IB examiners mark work produced for external assessment, while work produced for internal assessment is marked by teachers and externally moderated by the IB.

There are two types of assessment identified by the IB.

- Formative assessment informs both teaching and learning. It is concerned with providing accurate and helpful feedback to students and teachers on the kind of learning taking place and the nature of students' strengths and weaknesses in order to help develop students' understanding and capabilities. Formative assessment can also help to improve teaching quality, as it can provide information to monitor progress towards meeting the course aims and objectives.
- Summative assessment gives an overview of previous learning and is concerned with measuring student achievement.

The Diploma Programme primarily focuses on summative assessment designed to record student achievement at, or towards the end of, the course of study. However, many of the assessment instruments can also be used formatively during the course of teaching and learning, and teachers are encouraged to do this. A comprehensive assessment plan is viewed as being integral with teaching, learning and course organization. For further information, see the IB *Programme standards and practices* document.

The approach to assessment used by the IB is criterion-related, not norm-referenced. This approach to assessment judges students' work by their performance in relation to identified levels of attainment, and not in relation to the work of other students. For further information on assessment within the Diploma Programme please refer to the publication *Diploma Programme assessment: Principles and practice*.

To support teachers in the planning, delivery and assessment of the Diploma Programme courses, a variety of resources can be found on the OCC or purchased from the IB store (http://store.ibo.org). Teacher support materials, subject reports, internal assessment guidance, grade descriptors, as well as resources from other teachers, can be found on the OCC. Specimen and past examination papers, as well as markschemes, can be purchased from the IB store.

Methods of assessment

The IB uses several methods to assess work produced by students.

Assessment criteria

Assessment criteria are used when the assessment task is open-ended. Each criterion concentrates on a particular skill that students are expected to demonstrate. An assessment objective describes what students should be able to do and assessment criteria describe how well they should be able to do it. Using assessment criteria allows discrimination between different answers and encourages a variety of responses.

Each criterion comprises a set of hierarchically ordered level descriptors. Each level descriptor is worth one or more marks. Each criterion is applied independently using a best-fit model. The maximum marks for each criterion may differ according to the criterion's importance. The marks awarded for each criterion are added together to give the total mark for the piece of work.

Markbands

Markbands are a comprehensive statement of expected performance against which responses are judged. They represent a single holistic criterion divided into level descriptors. Each level descriptor corresponds to a range of marks to differentiate student performance. A best-fit approach is used to ascertain which particular mark to use from the possible range for each level descriptor.

Markschemes

This generic term is used to describe analytic markschemes that are prepared for specific examination papers. Analytic markschemes are prepared for those examination questions that expect a particular kind of response and/or a given final answer from the students. They give detailed instructions to examiners on how to break down the total mark for each question for different parts of the response. A markscheme may include the content expected in the responses to questions or may be a series of marking notes giving guidance on how to apply criteria.

Assessment outline—SL

First examinations 2013

Assessment component	Weighting
External assessment (3 hours)	**80%**
Paper 1 (1 hour and 30 minutes) An extended response paper (50 marks) Assessment objectives 1, 2, 3, 4 **Section A** Syllabus content: section 1—microeconomics Students answer one question from a choice of two. (25 marks) **Section B** Syllabus content: section 2—macroeconomics Students answer one question from a choice of two. (25 marks)	**40%**
Paper 2 (1 hour and 30 minutes) A data response paper (40 marks) Assessment objectives 1, 2, 3, 4 **Section A** Syllabus content: section 3—international economics Students answer one question from a choice of two. (20 marks) **Section B** Syllabus content: section 4—development economics Students answer one question from a choice of two. (20 marks)	**40%**
Internal assessment (20 teaching hours) This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Students produce a portfolio of three commentaries, based on different sections of the syllabus and on published extracts from the news media. Maximum 750 words x 3 (45 marks)	**20%**

Assessment outline—HL

First examinations 2013

Assessment component	Weighting
External assessment (4 hours)	**80%**
Paper 1 (1 hour and 30 minutes) An extended response paper (50 marks) Assessment objectives 1, 2, 3, 4 **Section A** Syllabus content: section 1—microeconomics Students answer one question from a choice of two. (25 marks) **Section B** Syllabus content: section 2—macroeconomics Students answer one question from a choice of two. (25 marks)	**30%**
Paper 2 (1 hour and 30 minutes) A data response paper (40 marks) Assessment objectives 1, 2, 3, 4 **Section A** Syllabus content: section 3—international economics Students answer one question from a choice of two. (20 marks) **Section B** Syllabus content: section 4—development economics Students answer one question from a choice of two. (20 marks)	**30%**
Paper 3 (1 hour) HL extension paper (50 marks) Assessment objectives 1, 2 and 4 Syllabus content, including HL extension material: sections 1 to 4—microeconomics, macroeconomics, international economics, development economics Students answer two questions from a choice of three. (25 marks per question)	**20%**

Assessment component	Weighting
Internal assessment (20 teaching hours) This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Students produce a portfolio of three commentaries, based on different sections of the syllabus and on published extracts from the news media. Maximum 750 words x 3 (45 marks)	**20%**

External assessment

Two different methods are used to assess students.

- Detailed markschemes specific to each examination paper
- Markbands

For all three examination papers, there are markbands and markschemes. The markbands are related to the assessment objectives established for the economics course and the group 3 grade descriptors. The markschemes are specific to each examination paper.

Written papers

The external assessment in economics consists of two examination papers at SL and three examination papers at HL that are externally set and externally moderated. They are designed to allow students to demonstrate their competencies in relation to the economics assessment objectives and specific parts of the economics syllabus, namely the common topics and the HL extension material. All questions on the examination papers will be based on the topics in this guide.

The external components contribute 80% to the final assessment at both SL and HL.

In common with all examination papers, students at SL and HL are given five minutes of reading time before they begin answering the papers.

Command terms

Teachers must ensure that students are aware of the command terms used at each assessment objective level to understand the depth of treatment required in examination questions. There is a progression in demand from AO1 to AO3, while AO4 terms are specific to particular skills and techniques, and also to examination questions.

Questions may be from the same classification as specified in the learning outcomes, or a less demanding command term from a lower classification. For example, if the command term in the learning outcome is "explain", which is classified as AO2, an examination question could contain the command term "explain" or another command term, such as "suggest", which is also classified as AO2. Alternatively, the examination question could contain a command term from AO1, such as "describe". However, a more demanding command term, such as "evaluate", from a higher classification (AO3 in this case), cannot be used.

The command terms used in each question or part thereof indicate the depth required. Please refer in particular to the section "Command terms" in "Assessment objectives in practice". See also the external assessment details below and "Glossary of command terms".

Use of diagrams

Students are expected, where appropriate, to include correctly labelled and clearly drawn diagrams. Sometimes individual questions specify that the use of diagrams is essential because more detailed information is required from the students in order to show specific knowledge and understanding.

Use of examples

Students are expected, where appropriate, to illustrate their answers with examples in order to reach the highest markbands. Examples should be used to highlight economic concepts, theories and relationships in the real world. When examples are used, students should not just state the example (as this is too limited), but should also offer some explanation of the example in relation to the question asked.

Use of economic terms

Students are expected to demonstrate the ability to define the economic terms included in the syllabus details.

Use of calculators

Paper 1 and paper 2 (SL/HL)

Calculators are not permitted.

Paper 3 (HL only)

While all questions requiring a calculator can be answered fully using a four function (plus, minus, multiply, divide) calculator, graphic display calculators (GDCs) are allowed during the examination. The graphing functions on these calculators may assist students and it is therefore recommended that all students are familiar with the use of GDCs.

Teachers and schools **must** adhere to the regulations regarding the use of electronic calculators in examinations, and students must be made aware of these. This information can be found in the relevant section of the *Handbook of procedures for the Diploma Programme*.

Links to the specific details in the syllabus

Examination questions will be drawn from sections 1 to 4 of the syllabus, not from the foundations of economics or from any introductory section covered by the teacher (as outlined in "Approaches to the teaching of economics"). The questions will be drawn from the specific topic areas and will reflect the command terms used to describe the learning outcomes.

External assessment details—SL

Paper 1

Duration: 1 hour 30 minutes
Weighting: 40%

The structure of this paper is the same as HL paper 1 but the questions that require extended responses may be the same as, or different from, the HL paper 1 questions.

- Students answer two questions in total, one from section A and one from section B.
- In each section, students are required to answer one question from a choice of two.
- The questions are each subdivided into two parts, (a) and (b).

Students are expected to demonstrate the following assessment objectives.

Assessment objective	Sections A and B: Part (a)	Sections A and B: Part (b)
AO1—knowledge and understanding	✓	✓
AO2—application and analysis	✓	✓
AO3—synthesis and evaluation		✓
AO4—selection, use and application of a variety of appropriate skills and techniques	✓	✓

Section A

- The principal focus is on section 1 of the syllabus—microeconomics.
- While the principal focus of the questions is on section 1, it is likely that students will be required to draw on other sections of the syllabus.
- The command terms used in each question, or part thereof, indicate the depth required.
- Part (a) of each question requires knowledge and understanding, application and analysis and the selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 10 marks.
- Part (b) of each question requires knowledge and understanding, application and analysis, synthesis and evaluation, and the selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 15 marks.
- The section A question is worth a total of 25 marks.

Section B

- The principal focus is on section 2 of the syllabus—macroeconomics.
- While the principal focus of the questions is on section 2, it is likely that students will be required to draw on other sections of the syllabus.
- The command terms used in each question, or part thereof, indicate the depth required.
- Part (a) of each question requires knowledge and understanding, application and analysis, and the selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 10 marks.
- Part (b) of each question requires knowledge and understanding, application and analysis, synthesis and evaluation, and the selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 15 marks.
- The section B question is worth a total of 25 marks.

Responses are assessed with an analytic markscheme specific to the question paper, which indicates the required responses, any particular breakdown of marks and the markbands used to allocate marks.

Overall, the maximum for paper 1 is 50 marks.

Paper 2

Duration: 1 hour 30 minutes
Weighting: 40%

The structure of this paper is the same as HL paper 2. However, these data response questions may be the same as, or different from, those used for the HL paper.

The text/data used may not be the same at SL and at HL.

- Students answer two questions in total, one from section A and one from section B.
- In each section, students are required to answer one question from a choice of two.
- The questions are each subdivided into four parts, (a), (b), (c) and (d).

Students are expected to demonstrate the following assessment objectives.

Assessment objective	Sections A and B: Part (a)	Sections A and B: Part (b)	Sections A and B: Part (c)	Sections A and B: Part (d)
AO1—knowledge and understanding	✓	✓	✓	✓
AO2—application and analysis		✓	✓	✓
AO3—synthesis and evaluation				✓
AO4—selection, use and application of a variety of appropriate skills and techniques		✓	✓	

Section A

- The principal focus is on section 3 of the syllabus—international economics.
- While the principal focus of the questions is on section 3, it is likely that students will be required to draw on other sections of the syllabus.
- The command terms used in each question, or part thereof, indicate the depth required.
- Part (a) of each question requires knowledge and understanding. It is subdivided into (i) and (ii). The maximum for each of these is 2 marks, with a combined maximum of 4 marks.
- Part (b) of each question requires knowledge and understanding, application and analysis, and selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 4 marks.
- Part (c) of each question requires knowledge and understanding, application and analysis, and selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 4 marks.
- Part (d) of each question requires knowledge and understanding, application and analysis, and synthesis and evaluation. The maximum for this part is 8 marks.
- The section A question is worth a total of 20 marks.

Section B

- The principal focus is on section 4 of the syllabus—development economics.
- While the principal focus of the questions is on section 4, it is likely that students will be required to draw on other sections of the syllabus.
- The command terms used in each question, or part thereof, indicate the depth required.
- Part (a) of each question requires knowledge and understanding. It is subdivided into (i) and (ii). The maximum for each of these is 2 marks, with a combined maximum of 4 marks.
- Part (b) of each question requires knowledge and understanding, application and analysis, and selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 4 marks.
- Part (c) of each question requires knowledge and understanding, application and analysis, and selection, use and application of a variety of appropriate skills and techniques. The maximum for this part is 4 marks.
- Part (d) of each question requires knowledge and understanding, application and analysis, and synthesis and evaluation. The maximum for this part is 8 marks.
- The section B question is worth a total of 20 marks.

Responses are assessed with an analytic markscheme specific to the question paper, which indicates the required responses, any particular breakdown of marks and the markbands used to allocate marks.

Overall, the maximum for paper 2 is 40 marks.

External assessment details—HL

Paper 1

Duration: 1 hour 30 minutes
Weighting: 30%

The structure of this paper is the same as SL paper 1. However, the questions that require extended responses may be the same as, or different from, the SL paper 1 questions.

Please see the section "External assessment details—SL", for further details.

Paper 2

Duration: 1 hour 30 minutes
Weighting: 30%

The structure of this paper is the same as SL paper 2. However, these data response questions may be the same as, or different from, the SL paper.

The texts/data used may not be the same as at SL.

Please see the section "External assessment details—SL", for further details.

Paper 3

Duration: 1 hour
Weighting: 20%

- Students answer two questions in total, from a choice of three questions.
- The questions are each subdivided into a number of parts. The number of parts will vary.

Students are expected to demonstrate the following assessment objectives.

Assessment objective	All questions
AO1—knowledge and understanding	✓
AO2—application and analysis	✓
AO3—synthesis and evaluation	
AO4—selection, use and application of a variety of appropriate skills and techniques	✓

Examination questions

- The focus of the questions is on the syllabus content from sections 1 to 4, including the HL extension material and topics studied at HL only.
- The command terms used indicate the depth of response required.
- Each question requires knowledge and understanding, application and analysis, and selection, use and application of a variety of appropriate skills and techniques.
- Many question parts require the use of a calculator. Graphic display calculators (GDCs) are allowed during the examination, and students should be familiar with their use. Full details are given in the section "Use of calculators".
- Each question is worth 25 marks.
- A question and answer booklet will be provided, and additional answer sheets may be used if necessary.

Responses are assessed with an analytic markscheme specific to the question paper, which indicates the required responses and any particular breakdown of marks. A markband approach is used to allocate the marks for questions using AO2 command terms, such as "explain". The markband descriptors will vary depending on the content of the examination. A typical example is given below.

Level	Level descriptor	Marks 0–4
0	The work does not reach a standard described by the descriptors below.	0
1	The written response is limited.	1–2
2	The written response is clear.	3–4

Overall, the maximum for this paper is 50 marks.

External assessment markbands—SL and HL

Paper 1 (SL/HL)

Section A and section B

Part (a)

Level	Level descriptor	Marks 0–10
0	The work does not reach a standard described by the descriptors below.	0
1	There is little understanding of the specific demands of the question. Relevant economic terms are not defined. There is very little knowledge of relevant economic theory. There are significant errors.	1–3
2	There is some understanding of the specific demands of the question. Some relevant economic terms are defined. There is some knowledge of relevant economic theory. There are some errors.	4–6
3	There is understanding of the specific demands of the question. Relevant economic terms are defined. Relevant economic theory is explained and applied. Where appropriate, diagrams are included and applied. Where appropriate, examples are used. There are few errors.	7–8
4	There is clear understanding of the specific demands of the question. Relevant economic terms are clearly defined. Relevant economic theory is clearly explained and applied. Where appropriate, diagrams are included and applied effectively. Where appropriate, examples are used effectively. There are no significant errors.	9–10

Section A and section B

Part (b)

Level	Level descriptor	Marks 0–15
0	The work does not reach a standard described by the descriptors below.	0
1	There is little understanding of the specific demands of the question. Relevant economic terms are not defined. There is very little knowledge of relevant economic theory. There are significant errors.	1–5
2	There is some understanding of the specific demands of the question. Some relevant economic terms are defined. There is some knowledge of relevant economic theory. There are some errors.	6–9
3	There is understanding of the specific demands of the question. Relevant economic terms are defined. Relevant economic theory is explained and applied. Where appropriate, diagrams are included and applied. Where appropriate, examples are used. There is an attempt at synthesis or evaluation. There are few errors.	10–12
4	There is clear understanding of the specific demands of the question. Relevant economic terms are clearly defined. Relevant economic theory is clearly explained and applied. Where appropriate, diagrams are included and applied effectively. Where appropriate, examples are used effectively. There is evidence of appropriate synthesis or evaluation. There are no significant errors.	13–15

Paper 2 (SL/HL)

Section A and section B

Part (a): (i) and (ii)

Level	Level descriptor	Marks 0–2
0	The work does not reach a standard described by the descriptors below.	0
1	There is limited understanding **or** vague definition.	1
2	There is clear understanding **or** accurate definition.	2

Part (b) and part (c)

Level	Level descriptor	Marks 0–4
0	The work does not reach a standard described by the descriptors below.	0
1	The written response is limited.	1–2
2	The written response is accurate.	3–4

Or

Level	Level descriptor	Marks 0–4
0	The work does not reach a standard described by the descriptors below.	0
1	There is a correct diagram **or** an accurate written response.	1–2
2	There is a correct diagram **and** an accurate written response.	3–4

Part (d)

Level	Level descriptor	Marks 0–8
0	The work does not reach a standard described by the descriptors below.	0
1	Few relevant concepts are recognized. There is basic knowledge/understanding.	1–2
2	Relevant concepts are recognized and developed in reasonable depth. There is clear knowledge/understanding. There is some attempt at application/analysis.	3–5
3	Relevant concepts are recognized and developed in reasonable depth. There is clear knowledge/understanding. There is effective application/analysis. There is synthesis/evaluation, supported by appropriate theory and evidence.	6–8

Internal assessment

Purpose of internal assessment

Internal assessment is an integral part of the course and is compulsory for both SL and HL students. It enables students to demonstrate the application of their skills and knowledge, and to pursue their personal interests, without the time limitations and other constraints that are associated with written examinations. The internal assessment should, as far as possible, be woven into normal classroom teaching and not be a separate activity conducted after a course has been taught.

The internal assessment requirements at SL and at HL are the same.

Guidance and authenticity

The portfolio submitted for internal assessment must be the student's own work. However, it is not the intention that students should decide on the appropriate articles and then be left to work on the internally assessed component without any further support from the teacher. The teacher should play an important role during both the planning stage and the period when the student is working on the internally assessed work. It is the responsibility of the teacher to ensure that students are familiar with:

- the requirements of the type of work to be internally assessed—the nature of the sources of the articles, and the formal requirements of the portfolio—and the IB's academic honesty policy
- internal deadlines
- the nature of teacher support
- the assessment criteria; students must understand that the work submitted for assessment must address these criteria effectively.

Teachers and students must discuss the internally assessed work. Students should be encouraged to initiate discussions with the teacher to obtain advice and information, and students must not be penalized for seeking guidance. However, if a student could not have completed the work without substantial support from the teacher, this should be recorded on the appropriate form from the *Handbook of procedures for the Diploma Programme*.

It is the responsibility of teachers to ensure that all students understand the basic meaning and significance of concepts that relate to academic honesty, especially authenticity and intellectual property. Teachers must ensure that all student work for assessment is prepared according to the requirements and must explain clearly to students that internally assessed work must be entirely their own.

As part of the learning process, teachers can give advice to students on a first draft of the internally assessed work. This advice should be in terms of the way the work could be improved, but this first draft must not be heavily annotated or edited by the teacher. The next version handed to the teacher after the first draft must be the final one.

All work submitted to the IB for moderation or assessment must be authenticated by a teacher, and must not include any known instances of suspected or confirmed malpractice. Each student must sign the coversheet for internal assessment to confirm that the work is his or her authentic work and constitutes the

final version of the work. Once a student has officially submitted the final version of the work to a teacher (or the coordinator) for internal assessment, together with the signed coversheet, it cannot be retracted.

Authenticity may be checked by discussion with the student on the content of the work and scrutiny of one or more of the following:

- the student's initial choice of articles
- the first draft of the written work
- the references cited
- the style of writing compared with work known to be that of the student.

The requirement for teachers and students to sign the coversheet for internal assessment applies to the work of all students, not just the sample work that will be submitted to an examiner for the purpose of moderation. If the teacher and student sign a coversheet, but there is a comment to the effect that the work may not be authentic, the student will not be eligible for a mark in that component and no grade will be awarded. For further details refer to the IB publication *Academic honesty* and the relevant articles in the *General regulations: Diploma Programme*.

The same piece of work cannot be submitted to meet the requirements of both the internal assessment and the extended essay.

Time allocation

Internal assessment is an integral part of the economics course, contributing 20% to the final assessment in the SL and the HL courses. This weighting should be reflected in the time that is allocated to teaching the knowledge, skills and understanding required to undertake the work, as well as the total time allocated to carry out the work.

It is recommended that a total of approximately 20 hours should be allocated to the portfolio at both SL and HL. This should include:

- time for the teacher to explain to students the requirements of the internal assessment
- class time for students to work on the internal assessment component
- time for consultation between the teacher and each student
- time to review and monitor progress and to check authenticity.

Requirements and recommendations

It is important for the integrity of the moderation process that the internal assessment by the teacher is based on the same evidence as that available to the moderator.

When there is more than one teacher teaching students in this component, internal standardization must take place.

Using assessment criteria for internal assessment

For internal assessment, a number of assessment criteria have been identified. Each assessment criterion has level descriptors describing specific levels of achievement together with an appropriate range of marks. The level descriptors concentrate on positive achievement although, for the lower levels, failure to achieve may be included in the description.

Teachers must judge the internally assessed work at SL and at HL against the criteria using the level descriptors.

- The same assessment criteria are provided for SL and HL.
- The aim is to find, for each criterion, the descriptor that conveys most accurately the level attained by the student, using the best-fit model. A best-fit approach means that compensation should be made when a piece of work matches different aspects of a criterion at different levels. The mark awarded should be one that most fairly reflects the balance of achievement against the criterion. It is not necessary for every single aspect of a level descriptor to be met for that mark to be awarded.
- When assessing a student's work, teachers should read the level descriptors for each criterion until they reach a descriptor that most appropriately describes the level of the work being assessed. If a piece of work seems to fall between two descriptors, both descriptors should be read again and the one that more appropriately describes the student's work should be chosen.
- Where there are two or more marks available within a level, teachers should award the upper marks if the student's work demonstrates the qualities described to a great extent. Teachers should award the lower marks if the student's work demonstrates the qualities described to a lesser extent.
- Only whole numbers should be recorded; partial marks, that is, fractions and decimals, are not acceptable.
- Teachers should not think in terms of a pass or fail boundary, but should concentrate on identifying the appropriate descriptor for each assessment criterion.
- The highest level descriptors do not imply faultless performance but should be achievable by a student. Teachers should not hesitate to use the extremes if they are appropriate descriptions of the work being assessed.
- A student who attains a high level of achievement in relation to one criterion will not necessarily attain high levels of achievement in relation to the other criteria. Similarly, a student who attains a low level of achievement for one criterion will not necessarily attain low achievement levels for the other criteria. Teachers should not assume that the overall assessment of the students will produce any particular distribution of marks.
- It is recommended that the assessment criteria be made available to students.

Internal assessment details—SL and HL

Portfolio

Duration: 20 hours
Weighting: 20%

Rationale

Internal assessment in economics enables students to demonstrate the application of their knowledge and understanding of economic theory to real-world situations.

Requirements

Both SL and HL economics students produce a portfolio of **three** commentaries based on articles from published news media. Each article **must** be based on a different section of the syllabus (microeconomics, macroeconomics, international economics and development economics).

Articles

The articles may be from a newspaper, a journal or the internet, but must not be from television or radio broadcasts. If a student includes a relatively lengthy article, which is very much discouraged, the student must highlight the section(s) of the article upon which the commentary is based.

The article on which the commentary is based should, where possible, be in the same language as the commentary. If an extract in another language is used, the student must provide an accurate translation of the whole article. Students must also include the original article in their portfolio.

Individual work

Students must select their own articles to discuss. It may happen that more than one student bases his or her commentary on the same article, but the article must not be given to the class by the teacher, and the production of the commentary must be each student's individual work. A commentary must not be prepared collaboratively.

Focus

Each commentary must:

- explain the linkages between the article and economic theory taken from the section of the syllabus on which the article is based
- demonstrate economic insights into the implications of the article (that is, it should provide evidence of the student's ability to discuss current events from the point of view of an economist).

On each commentary students must record:

- the title of the article
- the source of the article (including date of access to the site if from the internet)
- the date the article was published
- the date the commentary was written
- the word count of the commentary
- the section of the syllabus to which the article relates.

Each commentary in the portfolio is assessed individually against the internal assessment criteria. The teacher will initially assess each student's work. Please note that internal standardization must take place when more than one teacher is assessing. A sample of the work will then be moderated by the IB.

Please refer to the *Handbook of procedures for the Diploma Programme* for details on how to present the work for moderation.

Rubric requirements

If students do not adhere to the following requirements, they can lose marks under criterion F: Rubric requirements.

1. Word limit

Students must produce a portfolio of three commentaries. Each commentary must not exceed 750 words.

> **Note:** Moderators will not read beyond 750 words for each commentary.

The following are **not** included in the word count.

- Acknowledgments
- Contents page
- Diagrams
- Labels—of five words or fewer
- Headings on diagrams—of 10 words or fewer
- Tables of statistical data
- Equations, formulae and calculations
- Citations (which, if used, must be in the body of the commentary)
- References (which, if used, must be in the footnotes/endnotes)

Please note that footnotes/endnotes may be used for references only. Definitions of economic terms and quotations, if used, must be in the body of the work and are included in the word count. Please note that a citation is a shorthand method of making a reference in the body of the commentary, which is then linked to the full reference in the footnotes/endnotes.

2. Articles

Each article must be based on a different section of the syllabus.

3. Sources

Students must use a different source for each commentary.

4. Contemporary articles

Students need to look for articles relating to current events and these must be published no earlier than one year before the writing of the commentary.

5. Contents

Each portfolio must contain:

- a summary portfolio coversheet
- a commentary coversheet for each commentary
- three commentaries, accompanied in each case by the relevant article.

Internal assessment criteria—SL and HL

Overview

There are five internal assessment criteria for each commentary.

Criterion A	Diagrams	3 marks
Criterion B	Terminology	2 marks
Criterion C	Application	2 marks
Criterion D	Analysis	3 marks
Criterion E	Evaluation	4 marks
	Total	14 marks

There is one internal assessment criterion for the whole portfolio.

Criterion F	Rubric requirements	3 marks

Each commentary is assessed individually for the first five assessment criteria (criteria A–E) and then criterion F is applied to the whole portfolio.

The maximum for the portfolio is 45 marks: (14 marks x 3 commentaries) + 3 marks = 42 + 3 marks.

The assessment criteria are related to the assessment objectives.

- Criterion A: AO2 and AO4
- Criterion B: AO1
- Criterion C: AO2
- Criterion D: AO2
- Criterion E: AO3
- Criterion F: AO4

Portfolio (SL/HL)

Criterion A: Diagrams

- This criterion assesses the extent to which the student is able to construct and use diagrams.

Level	Descriptor
0	The work does not reach a standard described by the descriptors below.
1	Relevant diagram(s) are included but not explained, or the explanations are incorrect.
2	Relevant, accurate and correctly labelled diagram(s) are included, with a limited explanation.
3	Relevant, accurate and correctly labelled diagram(s) are included, with a full explanation.

Criterion B: Terminology

- This criterion assesses the extent to which the student uses appropriate economic terminology.

Level	Descriptor
0	The work does not reach a standard described by the descriptors below.
1	Terminology relevant to the article is included in the commentary.
2	Terminology relevant to the article is used appropriately throughout the commentary.

Criterion C: Application

- This criterion assesses the extent to which the student recognizes, understands and applies economic information in the context of the article.

Level	Descriptor
0	The work does not reach a standard described by the descriptors below.
1	Relevant economic concepts and/or theories are applied to the article.
2	Relevant economic concepts and/or theories are applied to the article appropriately throughout the commentary.

Criterion D: Analysis

- This criterion assesses the extent to which the student can explain and develop appropriate economic theories and/or concepts in the context of the article.

Level	Descriptor
0	The work does not reach a standard described by the descriptors below.
1	There is limited economic analysis relating to the article.
2	There is appropriate economic analysis relating to the article.
3	There is effective economic analysis relating to the article.

Criterion E: Evaluation

- This criterion assesses the extent to which the student synthesizes his or her analysis in order to make judgments that are supported by reasoned arguments.

Level	Descriptor
0	The work does not reach a standard described by the descriptors below.
1	Judgments are made that are unsupported, or supported, by incorrect reasoning.
2	Judgments are made that are supported by limited reasoning.
3	Judgments are made that are supported by appropriate reasoning.
4	Judgments are made that are supported by effective and balanced reasoning.

Criterion F: Rubric requirements

- This criterion assesses the extent to which the student meets the five rubric requirements for the complete portfolio.
  - Each commentary does not exceed 750 words.
  - Each article is based on a different section of the syllabus.
  - Each article is taken from a different and appropriate source.
  - Each article was published no earlier than one year before the writing of the commentary.
  - The summary portfolio coversheet, three commentary coversheets and the article for each commentary are included.

Level	Descriptor
0	The work does not reach a standard described by the descriptors below.
1	Three rubric requirements are met.
2	Four rubric requirements are met.
3	All five rubric requirements are met.

Glossary of command terms

Command terms with definitions

Students should be familiar with the following key terms and phrases used in examination questions, which are to be understood as described below. Although these terms will be used frequently in examination questions, other terms may be used to direct students to present an argument in a specific way.

The assessment objectives (AOs) listed in the table are those referred to in the economics syllabus.

Command term:		Definition asks students to:
Analyse	AO2	Break down in order to bring out the essential elements or structure.
Apply	AO2	Use an idea, equation, principle, theory or law in relation to a given problem or issue.
Calculate	AO4	Obtain a numerical answer showing the relevant stages in the working.
Comment	AO2	Give a judgment based on a given statement or result of a calculation.
Compare	AO3	Give an account of the similarities between two (or more) items or situations, referring to both (all) of them throughout.
Compare and contrast	AO3	Give an account of similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.
Construct	AO4	Display information in a diagrammatic or logical form.
Contrast	AO3	Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.
Define	AO1	Give the precise meaning of a word, phrase, concept or physical quantity.
Derive	AO4	Manipulate a mathematical relationship to give a new equation or relationship.
Describe	AO1	Give a detailed account.
Determine	AO4	Obtain the only possible answer.
Discuss	AO3	Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.

Distinguish	AO2	Make clear the differences between two or more concepts or items.
Draw	AO4	Represent by means of a labelled, accurate diagram or graph, using a pencil. A ruler (straight edge) should be used for straight lines. Diagrams should be drawn to scale. Graphs should have points correctly plotted (if appropriate) and joined in a straight line or smooth curve.
Evaluate	AO3	Make an appraisal by weighing up the strengths and limitations.
Examine	AO3	Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.
Explain	AO2	Give a detailed account including reasons or causes.
Identify	AO4	Provide an answer from a number of possibilities.
Justify	AO3	Give valid reasons or evidence to support an answer or conclusion.
Label	AO4	Add labels to a diagram.
List	AO1	Give a sequence of brief answers with no explanation.
Measure	AO4	Obtain a value for a quantity.
Outline	AO1	Give a brief account or summary.
Plot	AO4	Mark the position of points on a diagram.
Show	AO4	Give the steps in a calculation or derivation.
Show that	AO4	Obtain the required result (possibly using information given) without the formality of proof. "Show that" questions do not generally require the use of a calculator.
Sketch	AO4	Represent by means of a diagram or graph (labelled as appropriate). The sketch should give a general idea of the required shape or relationship, and should include relevant features.
Solve	AO4	Obtain the answer(s) using algebraic and/or numerical and/or graphical methods.
State	AO1	Give a specific name, value or other brief answer without explanation or calculation.
Suggest	AO2	Propose a solution, hypothesis or other possible answer.
To what extent	AO3	Consider the merits or otherwise of an argument or concept. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.

The balance of payments

Structure of the balance of payments

While the structure of the balance of payments may vary from country to country, a working version of the structure (and components) of the balance of payments is given below and must be used by DP economics students for the purposes of the curriculum and assessment.

Current account

- Balance of trade in goods
- Balance of trade in services
- Income
- Current transfers

Capital account

- Capital transfers
- Transactions in non-produced, non-financial assets

Financial account

- Direct investment
- Portfolio investment
- Reserve assets

Current account = capital account + financial account + errors and omissions