

3 Subject Content – AS

During their course of study, students should be encouraged to develop a critical approach to economic models and methods of enquiry. They should have a good knowledge of developments in the UK economy and government policies over the past fifteen years.

Students will be assessed through two examination papers. The first paper will examine mainly the microeconomic topics that are outlined in Section 3.1 of the specification but economic principles included in Section 3.2 of the specification may also enrich a student's response to some questions. Similarly, the second paper will examine mainly the macroeconomic topics that are outlined in Section 3.2 of the specification but may draw on economic principles from Section 3.1.

Students will be expected to acquire competence in quantitative skills that are relevant to the subject content and be familiar with the various types of statistical and other data which are commonly used by economists. They should be able to make relevant calculations from economic data and be able to interpret data presented in the form of index numbers. Examples of other relevant quantitative skills include: the construction and use of graphs and the application of statistical measures such as the mean and median.

Students should understand the role of evidence in economic decision making but should appreciate the importance of value judgements.

It is expected that students will acquire a good knowledge of trends and developments in the economy which have taken place over the past fifteen years and also have an awareness of earlier events where this helps to give recent developments a longer term perspective.

3.1 The operation of markets and market failure

This section of the specification is primarily about microeconomics. Students will be required to acquire knowledge and understanding of a selection of microeconomic models and to apply these to current problems and issues. Microeconomic models such as demand and supply, the operation of the price mechanism and causes of market failure are central to this part of the specification. Students should be provided with opportunities to use these models to explore current economic behaviour. When applying and evaluating all the microeconomic models in the specification, such as supply and demand theory and production possibility curves, students should be critically aware of the assumptions upon which these models are based and their limitations when they are used to make sense of real world phenomena. Students should be able to apply their knowledge and skills to a wide variety of situations and to different markets and examples of market failure, including environmental market failures. They should appreciate that economic decisions relating to individual markets may be affected by developments in the macroeconomy.

3.1.1 Economic methodology and the economic problem

3.1.1.1 Economic methodology

Content	Additional information
<ul style="list-style-type: none">• Economics as a social science.• Similarities to and differences in methodology from natural and other sciences.• The difference between positive and normative statements.• How value judgements influence economic decision making and policy.• People's views concerning the best option are influenced by the positive consequences of different decisions and by moral and political judgements.	Students should understand how thinking as an economist may differ from other forms of scientific enquiry.

3.1.1.2 The nature and purpose of economic activity

Content	Additional information
<ul style="list-style-type: none">• The central purpose of economic activity is the production of goods and services to satisfy needs and wants.• The key economic decisions are: what to produce, how to produce, and who is to benefit from the goods and services produced.	

3.1.1.3 Economic resources

Content	Additional information
<ul style="list-style-type: none">• The economists' classification of economic resources into land, labour, capital and enterprise, which are the factors of production.• The environment is a scarce resource.	

3.1.1.4 Scarcity, choice and the allocation of resources

Content	Additional information
<ul style="list-style-type: none">• The fundamental economic problem is scarcity and that it results from limited resources and unlimited wants.• Scarcity means that choices have to be made about how scarce resources are allocated between different uses.• Choices have an opportunity cost.	

3.1.1.5 Production possibility diagrams

Content	Additional information
<ul style="list-style-type: none">• Production possibility diagrams illustrate different features of the fundamental economic problem, such as: resource allocation, opportunity cost and trade-offs, unemployment of economic resources, economic growth.• Why all points on the boundary are productively efficient but not all points on the boundary are allocatively efficient.	Students should be able to use production possibility diagrams to illustrate these features.

3.1.2 Price determination in a competitive market

3.1.2.1 The determinants of the demand for goods and services

Content	Additional information
<ul style="list-style-type: none"> The factors which determine the demand for a good or service. A demand curve shows the relationship between price and quantity demanded. The causes of shifts in the demand curve. 	<p>Students should understand the factors that influence the spending decisions of consumers, including: price, income, wealth, the price of substitutes and complementary goods, and individual preferences. They should also appreciate that such decisions are influenced by social and emotional factors.</p>

3.1.2.2 Price, income and cross elasticities of demand

Content	Additional information
<ul style="list-style-type: none"> Be able to calculate price, income and cross elasticities of demand. The relationship between income elasticity of demand and normal and inferior goods. The relationship between cross elasticity of demand and substitute and complementary goods. The relationships between price elasticity of demand and firms' total revenue (total expenditure). The factors that influence these elasticities of demand. 	<p>Students should be able to interpret numerical values of these elasticities of demand.</p>

3.1.2.3 The determinants of the supply of goods and services

Content	Additional information
<ul style="list-style-type: none"> The factors which determine the supply of a good or service. A supply curve shows the relationship between price and quantity supplied. Understand higher prices imply higher profits and that this will provide the incentive to expand production. The causes of shifts in the supply curve. 	

3.1.2.4 Price elasticity of supply

Content	Additional information
<ul style="list-style-type: none"> Be able to calculate price elasticity of supply. The factors that influence price elasticity of supply. 	<p>Students should be able to interpret numerical values of price elasticity of supply.</p>

3.1.2.5 The determination of equilibrium market prices

Content	Additional information
<ul style="list-style-type: none">• How the interaction of demand and supply determines equilibrium prices in a market economy.• The difference between equilibrium and disequilibrium.• Why excess demand and excess supply lead to changes in price.	<p>Students should be able to use demand and supply diagrams to help them to analyse causes of changes in equilibrium market prices.</p> <p>They should be able to apply their knowledge of the basic model of demand and supply to a variety of real-world markets.</p>

3.1.2.6 The interrelationship between markets

Content	Additional information
<ul style="list-style-type: none">• Changes in a particular market are likely to affect other markets.• The implications of joint demand, demand for substitute goods, composite demand, derived demand and joint supply.	<p>Students should, for example, be able to explore the impact of changes in demand, supply and price in one market upon other related markets.</p>

3.1.3 Production, costs and revenue

3.1.3.1 Production and productivity

Content	Additional information
<ul style="list-style-type: none">• Production converts inputs, or the services of factors of production such as capital and labour, into final output.• The meaning of productivity, including labour productivity.	

3.1.3.2 Specialisation, division of labour and exchange

Content	Additional information
<ul style="list-style-type: none">• The benefits of specialisation and division of labour.• Why specialisation necessitates an efficient means of exchanging goods and services, such as the use of money as a medium of exchange.	

3.1.3.3 Costs of production

Content	Additional information
<ul style="list-style-type: none"> The difference between the short run and the long run. The difference between fixed and variable costs. The difference between average and total costs. 	<p>Students should be able to calculate average and total costs from given data.</p> <p>Students should appreciate that the short-run average cost curve is likely to be U-shaped but a formal link with the law of diminishing returns is not expected. They should understand that the shape of the long-run average cost curve is determined by economies and diseconomies of scale.</p>

3.1.3.4 Economies and diseconomies of scale

Content	Additional information
<ul style="list-style-type: none"> The difference between internal and external economies of scale. Reasons for diseconomies of scale. The relationship between economies of scale, diseconomies of scale and the shape of the long-run average cost curve. 	<p>Students should be able to categorise and give examples of both internal and external economies of scale.</p>

3.1.3.5 Average revenue, total revenue and profit

Content	Additional information
<ul style="list-style-type: none"> The difference between average and total revenue. Why the average revenue curve is the firm's demand curve. Profit is the difference between total revenue and total costs. 	<p>Students should be able to calculate average, total revenue and profit from given data.</p>

3.1.4 Competitive and concentrated markets

3.1.4.1 Market structures

Content	Additional information
<ul style="list-style-type: none">• There is a range of market structures.• Factors such as the number of firms, the degree of product differentiation and ease of entry are used to distinguish between different market structures.	Students are not required to draw or use the traditional 'theory of the firm' diagrams.

3.1.4.2 The objectives of firms

Content	Additional information
<ul style="list-style-type: none">• Profit is an important objective of most firms.• Firms may also have other objectives such as survival, growth and increasing their market share.	Students should be aware that firms may have a variety of objectives but a detailed knowledge of these objectives is not required. However, students should appreciate that the objectives of a firm will affect its behaviour.

3.1.4.3 Competitive markets

Content	Additional information
<ul style="list-style-type: none">• The main characteristics of a perfectly competitive market.• In such markets the price is determined by the interaction of demand and supply.• Why profits are likely to be lower in a competitive market than in a market which is dominated by a few large firms.	An understanding of the formal model of perfect competition and the associated diagrams is not required.

3.1.4.4 Monopoly and monopoly power

Content	Additional information
<ul style="list-style-type: none"> • The difference between pure monopoly and monopoly power. • Monopoly power is influenced by factors such as barriers to entry, the number of competitors, advertising and the degree of product differentiation. • Concentration ratios and how to calculate a concentration ratio. • The basic model of monopoly suggests that higher prices and profits and inefficiency may result in a misallocation of resources compared to the outcome in a competitive market. • The potential benefits from monopoly, for example, economies of scale and possibly more invention and innovation. 	<p>Students should appreciate that there are few examples of pure monopoly but many firms have monopoly power.</p> <p>A formal diagrammatic analysis of monopoly is not required but students should be able to use a demand curve to illustrate that if a monopolist raises the market price above the competitive level, output will fall. They should also be able to use a long-run average cost curve to illustrate the benefits from economies of scale that may result from monopoly.</p> <p>Students should appreciate the various factors which affect the behaviour and performance of firms in a variety of real-world markets.</p>

3.1.4.5 The competitive market process

Content	Additional information
<ul style="list-style-type: none"> • Firms do not just compete on the basis of price but that competition will, for example, also lead firms to strive to improve products, reduce costs, improve the quality of the service provided. 	<p>Students should recognise that many large firms compete vigorously with each other but monopoly power may lead to consumers being exploited.</p>

3.1.5 The market mechanism, market failure and government intervention in markets

3.1.5.1 How markets and prices allocate resources

Content	Additional information
<ul style="list-style-type: none">• The rationing, incentive and signalling functions of prices in allocating resources and coordinating the decisions of buyers and sellers in a market economy.• The price mechanism is the way in which the basic economic problem is resolved in a market economy.	Students should understand how economic incentives influence what, how and for whom goods and services are produced.

3.1.5.2 The meaning of market failure

Content	Additional information
<ul style="list-style-type: none">• Market failure occurs whenever a market leads to a misallocation of resources.• What is meant by a misallocation of resources.• The difference between complete market failure (resulting in a missing market) and partial market failure (where a market exists but contributes to resource misallocation).• How public goods, positive and negative externalities, merit and demerit goods, monopoly and other market imperfections, and inequalities in the distribution of income and wealth can lead to market failure.	Students should be able to provide examples to inform their discussion of each of these causes of market failure.

3.1.5.3 Public goods, private goods and quasi-public goods

Content	Additional information
<ul style="list-style-type: none">• Pure public goods are non-rival and non-excludable and recognition of the significance of these characteristics.• The difference between a public good and a private good.• Circumstances when a public good may take on some of the characteristics of a private good and become a quasi-public good.• The significance of technological change, e.g. television broadcasting is now excludable.• The free-rider problem.	

3.1.5.4 Positive and negative externalities in consumption and production

Content	Additional information
<ul style="list-style-type: none"> Externalities exist when there is a divergence between private and social costs and benefits. Why negative externalities are likely to result in over-production and that positive externalities are likely to result in under-production. 	<p>Students should be able to illustrate the misallocation of resources resulting from externalities in both production and consumption, using demand and supply diagrams.</p> <p>Students are not required to use Marginal Social Cost/ Marginal Social Benefit (MSC/ MSB) diagrams.</p>

3.1.5.5 Merit and demerit goods

Content	Additional information
<ul style="list-style-type: none"> The classification of merit and demerit goods depends upon a value judgement. Such products may be subject to positive and negative externalities in consumption. How under-provision of merit goods and over-provision of demerit goods may also result from imperfect information. 	<p>Students should be able to illustrate the misallocation of resources resulting from the consumption of merit and demerit goods using demand and supply diagrams.</p> <p>Students are not required to use MSC/MSB diagrams.</p> <p>It should be understood that not all products that result in positive or negative externalities in consumption are either merit or demerit goods.</p>

3.1.5.6 Market imperfections

Content	Additional information
<ul style="list-style-type: none"> Why imperfect and asymmetric information can lead to market failure. Why the existence of monopoly and monopoly power can lead to market failure. Why the immobility of factors of production can lead to market failure. 	

3.1.5.7 An inequitable distribution of income and wealth

Content	Additional information
<ul style="list-style-type: none">• In the absence of government intervention, the market mechanism is likely to result in a very unequal and inequitable distribution of income and wealth.• In a market economy, an individual's ability to consume goods and services depends upon their income and wealth and an inequitable distribution of income and wealth is likely to lead to a misallocation of resources and hence market failure.	<p>At AS, students are not expected to have an in-depth knowledge of the causes of inequality but they should be aware that progressive taxes and government spending are used to reduce inequality.</p>

3.1.5.8 Government intervention in markets

Content	Additional information
<ul style="list-style-type: none">• The existence of market failure, in its various forms, provides an argument for government intervention in markets.• Governments influence the allocation of resources in a variety of ways, including through public expenditure, taxation and regulations.• Governments have a range of objectives and these affect how they intervene in a mixed economy to influence the allocation of resources.• The use of indirect taxation, subsidies, price controls, state provision and regulation to correct market failure.	<p>Students should be able to apply economic models to assess the role of markets and the government in a variety of situations.</p> <p>Students should appreciate the consequences of government intervention in markets for consumers, producers and other economic agents.</p> <p>Students should be able to evaluate the case for and against government intervention in particular markets and to assess the relative merits of different methods of intervention.</p>

3.1.5.9 Government failure

Content	Additional information
<ul style="list-style-type: none">• Government failure occurs when government intervention in the economy leads to a misallocation of resources.• Inadequate information, conflicting objectives and administrative costs are possible sources of government failure.• Governments may create, rather than remove, market distortions.• Government intervention can lead to unintended consequences.	<p>Students should appreciate that the possibility of government failure means that, even when there is market failure, government intervention will not necessarily improve economic welfare.</p> <p>Students should understand that consumers and producers may not have access to the same information and that this may contribute to markets operating inefficiently.</p>

3.2 The national economy in a global context

This section of the specification is primarily about macroeconomics. However, students should understand that microeconomic principles underpin the behaviour of the macroeconomy.

Understanding some aspects of macroeconomic behaviour requires that students have a firm grasp of related microeconomic principles, for example, understanding of price elasticity of demand is essential when analysing the extent to which a fall in the exchange rate will lead to an increase in exports.

Students will be required to acquire knowledge and understanding of AD/AS analysis and should be provided with opportunities to use this analysis to explore recent and current economic behaviour. They should understand, and be able to analyse and evaluate, macroeconomic policy.

When applying and evaluating all the macroeconomic models in the specification, such as the circular flow of income and the multiplier process, students should be critically aware of the assumptions upon which these models are based and their limitations when investigating macroeconomic and global issues.

Students should have a good knowledge of developments in the UK economy and government policies over the past fifteen years. They should also be aware that the performance of the United Kingdom economy is influenced by its membership of the European Union (EU) and by external events in the international economy.

3.2.1 The measurement of macroeconomic performance

3.2.1.1 The objectives of government economic policy

Content	Additional information
<ul style="list-style-type: none"> The main objectives of government macroeconomic policy: economic growth, price stability, minimising unemployment and a stable balance of payments on current account. The possibility of conflict arising, at least in the short run, when attempting to achieve these objectives. 	<p>Students should be aware that governments may also have other objectives of macroeconomic policy, such as balancing the budget and achieving an equitable distribution of income.</p> <p>They should be aware that the importance attached to the different objectives changes over time.</p>

3.2.1.2 Macroeconomic indicators

Content	Additional information
<ul style="list-style-type: none"> Data which is commonly used to measure the performance of an economy, such as: real GDP, real GDP per capita, Consumer Prices and Retail Prices Indices (CPI/RPI), measures of unemployment, productivity and the balance of payments on current account. 	

3.2.1.3 Uses of index numbers

Content	Additional information
<ul style="list-style-type: none">• How index numbers are calculated and interpreted, including the base year and the use of weights.• How index numbers are used to measure changes in the price level and changes in other economic variables.	A detailed technical knowledge is not expected of indices such as the Retail Prices Index (RPI) and Consumer Prices Index (CPI), but students should have an awareness of their underlying features, for example, the concept of the 'average family' and a 'basket of goods and services'.

3.2.2 How the macroeconomy works: the circular flow of income, aggregate demand/aggregate supply analysis, and related concepts

3.2.2.1 The circular flow of income

Content	Additional information
<ul style="list-style-type: none">• What national income measures.• The difference between nominal and real income.• Real national income as an indicator of economic performance.• The circular flow of income concept, the equation $\text{income} = \text{output} = \text{expenditure}$, and the concepts of equilibrium and full employment income.• The difference between injections and withdrawals into the circular flow of income.• The effect of changes in injections and withdrawals on national income.	Students are not expected to have a detailed knowledge of the construction of national income accounts.

3.2.2.2 Aggregate demand and aggregate supply analysis

Content	Additional information
<ul style="list-style-type: none">• Changes in the price level are represented by movements along the aggregate demand (AD) and aggregate supply (AS) curves.• The various factors that shift the AD curve and the short-run AS curve.• The factors which affect long-run AS distinguish them from those which affect short-run AS.• Underlying economic growth is represented by a rightward shift in the long-run AS curve.• How to use AD/AS diagrams to illustrate macroeconomic equilibrium.• How both demand-side and supply-side shocks affect the macroeconomy.	<p>Students should be able to use AD and AS analysis to help them explain macroeconomic problems and issues. For example, they should be able to use AD and AS diagrams to illustrate changes in the price level, demand-deficient (cyclical) unemployment and economic growth.</p> <p>Students should also understand how global economic events can affect the domestic economy.</p>

3.2.2.3 The determinants of aggregate demand

Content	Additional information
<ul style="list-style-type: none"> • What is meant by AD. • The determinants of AD, ie the determinants of consumption, investment, government spending, exports and imports. • The basic accelerator process. • The determinants of savings. • The difference between saving and investment. 	<p>Students will not be required to undertake calculations to illustrate the operation of the accelerator.</p> <p>Students should understand how changes in net exports affect AD and how global events affect economic performance.</p>

3.2.2.4 Aggregate demand and the level of economic activity

Content	Additional information
<ul style="list-style-type: none"> • The role of AD in influencing the level of economic activity. • The multiplier process and an explanation of why an initial change in expenditure may lead to a larger impact on local or national income. 	<p>Students will not be required to calculate the value of the multiplier using the marginal propensity to consume or the propensities to withdraw. However, they should be able to calculate the value of the multiplier from an initial change in injections and the resulting change in national income.</p>

3.2.2.5 Determinants of short-run aggregate supply

Content	Additional information
<ul style="list-style-type: none"> • The price level and production costs are the main determinants of the short-run AS. • Changes in costs, such as: money wage rates, raw material prices, business taxation and productivity, will shift the short-run AS curve. 	

3.2.2.6 Determinants of long-run aggregate supply

Content	Additional information
<ul style="list-style-type: none"> • The fundamental determinants of long-run AS such as technology, productivity, attitudes, enterprise, factor mobility, and economic incentives. • The position of the vertical long-run AS curve represents the normal capacity level of output of the economy. 	<p>It is assumed that the long-run AS curve is vertical.</p>

3.2.3 Economic performance

3.2.3.1 Economic growth and the economic cycle

Content	Additional information
<ul style="list-style-type: none">• The difference between short-run and long-run growth.• The various demand-side and supply-side determinants of short-run growth of real national income and the long-run trend rate of economic growth.• The concept of the economic cycle and the use of a range of economic indicators, such as real GDP, the rate of inflation, unemployment and investment, to identify the various phases of the economic cycle.• The difference between positive and negative output gaps.• How demand-side and supply-side shocks, including those that occur in the global economy, affect domestic economic activity.	<p>Students should be able to use a production possibility curve and AD/AS diagrams to illustrate the distinction between short-run and long-run economic growth.</p> <p>Students should understand that long-run economic growth occurs when the productive capacity of the economy is increasing and is a term used to refer to the trend rate of growth of real national output in an economy over time.</p> <p>Students should understand that a positive output gap occurs when real GDP is above the productive potential of the economy, and a negative output gap occurs when real GDP is below the economy's productive potential.</p>

3.2.3.2 Employment and unemployment

Content	Additional information
<ul style="list-style-type: none">• The main UK measures of unemployment, ie the claimant count and the Labour Force Survey measure.• The terms seasonal, frictional, structural and cyclical unemployment.• How employment and unemployment may be determined by both demand-side and supply-side factors.• How changes in the rest of the world affect employment and unemployment in the UK.	<p>Students should appreciate that unemployment has a variety of causes and hence the appropriate policies to reduce unemployment depend on the cause.</p>

3.2.3.3 Inflation and deflation

Content	Additional information
<ul style="list-style-type: none"> The concepts of inflation and deflation. Demand-pull and cost-push influences on the price level. How changes in world commodity prices affect domestic inflation. How changes in other economies can affect inflation in the UK. 	<p>Students should understand that deflation exists when the price level is falling whereas disinflation is when the rate of inflation is falling.</p> <p>Students should appreciate that deflationary policies are policies to reduce aggregate demand and do not necessarily result in deflation.</p>

3.2.3.4 The balance of payments on current account

Content	Additional information
<ul style="list-style-type: none"> The importance of international trade for an economy such as the UK. The current account comprises trade in goods, trade in services, primary income and secondary income. The meaning of a deficit and a surplus on current account. The factors that influence a country's current account balance such as productivity, inflation and the exchange rate and economic activity in other countries. 	<p>Students should be aware that the current account is only one part of the balance of payments but knowledge of the other parts of the account is not expected.</p>

3.2.3.5 Possible conflicts between macroeconomic policy objectives

Content	Additional information
<ul style="list-style-type: none"> How negative and positive output gaps relate to unemployment and inflationary pressures. How economic policies may be used to try to reconcile possible policy conflicts both in the short run and the long run. 	<p>Students should be able to use macroeconomic models, including the AD/AS model, to analyse the causes of possible conflicts between policy objectives in the short run and long run.</p>

3.2.4 Macroeconomic policy

3.2.4.1 Monetary policy

Content	Additional information
<ul style="list-style-type: none">• Monetary policy involves the central bank taking action to influence the manipulation of interest rates, the supply of money and credit, and the exchange rate.• The current objectives of monetary policy, set by the government.• The role of the Monetary Policy Committee of the Bank of England (MPC) and how it uses changes in bank rate to try to achieve the objectives for monetary policy, including the government's target rate of inflation.• The factors considered by the MPC when setting bank rate.• How changes in the exchange rate affect aggregate demand and the various macroeconomic policy objectives.	<p>Students do not need to know how interest rates and the exchange rate are determined but they do need to know how changes in interest rates and the exchange rate affect macroeconomic performance.</p>

3.2.4.2 Fiscal policy

Content	Additional information
<ul style="list-style-type: none">• Fiscal policy involves the manipulation of government spending, taxation and the budget balance.• Fiscal policy can have both macroeconomic and microeconomic functions.• How fiscal policy can be used to influence aggregate demand.• How fiscal policy can be used to influence aggregate supply.• How government spending and taxation can affect the pattern of economic activity.• The difference between direct and indirect taxes.• The difference between progressive, proportional and regressive taxes.• The relationship between the budget balance and the national debt.	<p>Students should be aware of the main taxes in the UK and the main categories of government spending, eg spending on defence, health, education and welfare.</p> <p>Students should appreciate that governments may deliberately run budget deficits and surpluses to try to influence aggregate demand but they are not required to understand the arguments relating to the pros and cons of balancing the budget or attempting to limit the size of the national debt.</p>

3.2.4.3 Supply-side policies

Content	Additional information
<ul style="list-style-type: none"> • The difference between supply-side policies and supply-side improvements in the economy. • How supply-side policies can help to achieve supply-side improvements in the economy. • How supply-side policies, such as tax changes designed to change personal incentives, may increase the potential output of the economy and improve the underlying trend rate of economic growth. • How supply-side policies can affect unemployment, the rate of change of prices and UK external performance, as reflected in the balance of payments on current account. • Supply-side policies include measures such as government spending on education and training, cuts in income and corporation tax, welfare reform, and industrial policy. 	<p>Students should recognise that supply-side improvements in the economy often originate in the private sector, independently of government, eg through productivity improvements, innovation and investment.</p>