IB Economics SL and HL Core

Both IB Economics SL and HL consist of the same core requirements that consist of differing number of hours. Both courses cover the same four sections even though Higher Level covers a few more sections.

1.1 Competitive Markets: Demand and Supply (Some Topics HL Only)

Subtopic	IB Points to Understand (for both SL and HL unless otherwise noted)
The nature of markets	• Outline the meaning of the term market.
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.
Linear demand functions (equations), demand schedules and graphs (HL ONLY)	• **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.**
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	• 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,

change supply or shift the supply curve)	indirect taxes and subsidies and the number of firms in the market can change supply.
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.
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 (HL ONLY)	• **Explain a supply function (equation) of the form Qs = c + dP.** • **Plot a supply curve from a linear function (e.g., 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.**
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 (HL ONLY)	• **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.** • **State the quantity of excess demand or excess supply in the above diagrams.**
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.
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	• Explain 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).

1.2 Elasticity

Subtopic	IB Points to Understand (for both SL and HL unless otherwise noted)
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 = (percentage change in quantity demanded) divided by (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 and its determinants	• Outline 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 = (percentage change in quantity demanded of good X) divided by (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.
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 and its determinants	• Outline 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 = (percentage change in quantity demanded) divided by (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 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 = (percentage change in quantity supplied) divided by (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 (Some Topics HL Extension, Plus One Topic HL Only)

Subtopic	IB Points to Understand (for both SL and HL unless otherwise noted)
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 (HL ONLY)	• **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).**
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). (HL ONLY)**
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). (HL ONLY)**
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. (HL ONLY)**

1.4 Market Failure (Some Topics HL Only)

Subtopic	IB Points to Understand (SL and HL unless otherwise noted)
Market failure as a failure to allocate resources efficiently	• Analyse the concept of market failure as a failure of the market to achieve allocative efficiency, resulting in an overallocation of resources (overprovision of a good) or an under-allocation of resources (under-provision of a good)
The meaning of externalities	• Describe 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. • 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 nonexcludable) 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.
Common access resources and the threat to sustainability	• Describe, using examples, common access resources. • Describe sustainability. • Explain that the lack of a pricing mechanism for common access resources means that these goods may be 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. • Explain, using negative externalities diagrams, that economic activity requiring the use of fossil fuels to satisfy demand poses a threat to sustainability. • Explain 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
Asymmetric information (HL ONLY)	• **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 (HL ONLY)	• **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.**

1.5 Theory of the Firm and Market Structures (HL Only)

Subtopic	IB Points to Understand (HL Only)
Production in the short run: the law of diminishing returns (HL ONLY)	• **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 (HL ONLY)	• **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 (HL ONLY)	• **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.** • **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 (HL ONLY)	• **Distinguish between increasing returns to scale, decreasing returns to scale and constant returns to scale.**
Costs of production in the long run (HL ONLY)	• **Outline 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.** • **Describe factors giving rise to economies of scale, including specialization, efficiency, marketing and indivisibilities.** • **Describe factors giving rise to diseconomies of scale, including problems of coordination and communication.**

Total revenue, average revenue and marginal revenue (HL ONLY)	• **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.**
Economic profit (sometimes known as abnormal profit) and normal profit (zero economic profit occurring at the breakeven point) (HL ONLY)	• **Describe economic profit (abnormal profit) as the case where total revenue exceeds economic cost.** • **Describe normal profit (zero economic profit) as the case where total revenue is equal to total economic costs or the situation in which the amount of revenue earned is just sufficient to keep the firm in its current line of 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.**
Profit maximization (HL ONLY)	• **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 (HL ONLY)	• **Describe alternative goals of firms, including revenue maximization, growth maximization, satisficing and corporate social responsibility.**
Assumptions of the model (HL ONLY)	• **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 (HL ONLY)	• **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 (HL ONLY)	• **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 (HL ONLY)	• **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 shortrun equilibrium to long-run equilibrium.**
Shut-down price and break-even price (HL ONLY)	• **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 shutdown price and the breakeven price from a set of data**
Efficiency (HL ONLY)	• **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 (HL ONLY)	• **Describe, using examples, the assumed characteristics of a monopoly: a single or dominant firm in the market; no close substitutes; significant barriers to entry.**
Barriers to entry (HL ONLY)	• **Describe, using examples, barriers to entry, including economies of scale, branding and legal barriers.**
Revenue curves (HL ONLY)	• **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 (HL ONLY)	• **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.** • **Explain the role of barriers to entry in permitting the firm to earn economic profit (abnormal profit).**
Revenue maximization (HL ONLY)	• **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.**
Natural monopoly (HL ONLY)	• **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 (HL ONLY)	• **Explain, using diagrams, why the profit maximizing choices of a monopoly firm lead to allocative inefficiency (welfare loss) and productive inefficiency.** • **Explain 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 (HL ONLY)	• **Evaluate the role of legislation and regulation in reducing monopoly power.**
The advantages and disadvantages of monopoly compared with perfect competition (HL ONLY)	• **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 (HL ONLY)	• **Describe, using examples, the assumed characteristics of a monopolistic competition: a large number of firms; differentiated products; absence of barriers to entry and exit.**
Revenue curves (HL ONLY)	• **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 (HL ONLY)	• **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 (HL ONLY)	• **Explain, using diagrams, why in the long run a firm in monopolistic competition will make normal profit.**
Non-price competition (HL ONLY)	• **Distinguish between price competition and non-price competition.** • **Describe examples of nonprice competition, including advertising, packaging, product development and quality of service.**
Monopolistic competition and efficiency (HL ONLY)	• **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 (HL ONLY)	• **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.**
Assumptions of the oligopoly model (HL ONLY)	• **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.** • **Explain why interdependence is responsible for 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 (HL ONLY)	• **Explain how game theory (the simple prisoner's dilemma) can illustrate strategic interdependence and the options available to oligopolies.**
Open/formal collusion (HL ONLY)	• **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.** • **Analyse the conditions that make cartel structures difficult to maintain.**
Tacit/informal collusion (HL ONLY)	• **Describe the term "tacit collusion", including reference to price leadership by a dominant firm.**
Non-collusive oligopoly (HL ONLY)	• **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.**
Necessary conditions for the practice of price discrimination (HL ONLY)	• **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.**