



# AS & A LEVEL OPTIONS BOOKLET 2025 - 2027

YOUR COMPLETE GUIDE TO Y11 & Y12 OPTIONS AT AL-MUSTAQBAL SCHOOL



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#### Welcome to Year 11 & 12

Starting Year 11 and 12 marks a significant yet exciting transition in your academic journey. For the first time, you have the opportunity to shape your education based on your interests, rather than following the broad curriculum of IGCSE. This is a chance to explore new subjects and let go of those that may not align with your future aspirations. Some subjects remain compulsory, as passing them is essential for university admission and obtaining the Palestinian Ministry of Education and Higher Education equivalency for your Cambridge qualifications.

While this period may feel overwhelming for both you and your parents, try to view it as an exciting opportunity to reflect on what subjects you enjoy and which ones you don't. It's also the perfect time to start considering your future career direction. Engage in discussions with as many people as possible—your parents, teachers, friends, older students, and our careers advisor—to gain insight into the subjects that will best support your goals. Additionally, explore various resources to understand university entry requirements, apprenticeships, and career paths. *Unifrog* is an invaluable tool to help guide your decision-making process.

When selecting your subjects, aim for a balanced approach—keeping your options open while also focusing on areas you genuinely enjoy. As with anything in life, finding the right balance is key.

We are here to support you every step of the way, so don't hesitate to reach out for guidance.

Wishing you all the best in this exciting new chapter!



#### **Qualification Stages**

# **Getting the equivalency for the Palestinian General Secondary Education Certificate**

To obtain accreditation from the **Palestinian Ministry of Higher Education & Scientific Research**, all students must meet the following requirements:

- a. Successfully complete **Grades 11 and 12**.
- b. By the end of Grade 12, students must complete and pass a total of **8 subjects** across IGCSE, GCE AS, and A Levels, distributed as follows:
  - 1. 2 A Level subjects (or alternatively, 1 A Level subject + 2 AS Level subjects).
  - 2. **6 IGCSE subjects**.
- c. **Arabic** must be included as one of the **8 subjects** if the student has studied in an Arabic-speaking country.
- d. Grade boundaries:

A Level subjects: A – E
 IGCSE subjects: A – D

e. Subjects taken at both **IGCSE and A Level** will be counted as separate subjects, except for **Arabic**. If Arabic is taken at both levels, the ministry will accredit **only one**—either the IGCSE or the A Level qualification.



# 1. Cambridge Assessment International Education qualification's equivalency rules to the Palestinian General Secondary of Education certificate of the Scientific Stream are as follows:

It is required, in compliance with the above rules (a-e), that the Scientific Stream student complete the following:

- a. Students are required to complete and pass the Mathematics subject, at either the A Level or the AS level as a minimum;
- b. Students are required to complete and pass 2 A Level subjects from the natural sciences subject group, with the option to substitute one of the A Level subjects with 2 AS subjects from natural sciences;
- c. IGCSE Mathematics is a compulsory subject for Scientific Stream students.

# Cambridge Assessment International Education qualification equivalency rules to the Palestinian General Secondary of Education certificate of the Literary Stream are as follows:

Any student who has not chosen the scientific stream can get a literacy stream equivalency under the condition that the student's qualification fulfill the rules (a-e) mentioned above.

#### **IMPORTANT UPDATE ON THE MINISTRY'S EQUIVALENCY RULES**

New subjects have been added to the equivalency list. The approved subjects are as follows:

- **Computer Science** Classified as a Scientific subject
- **Information Technology (IT)** Classified as a Scientific subject
- Environmental Management Classified as a Literary subject
- **Economics** Classified as a Literary subject

**Important Note:** According to the Palestinian Ministry of Higher Education and Scientific Research regulations:

- Students who pursue the **scientific secondary education pathway** are eligible to apply for both **scientific and literary-related majors** at university.
- Students who follow the **literary secondary education pathway** can only apply for **literary-related majors**.
- Students in the IT stream can obtain the ministry's scientific secondary education equivalency. However, they may face challenges gaining admission to certain universities for engineering, medicine, pharmacy, and natural science-related majors.



#### 2. Qualifications for Universities in Palestine

Local Universities follows the requirements of the Ministry Of Higher Education (mentioned in section 1 above) when dealing with students holding IGCSE, GCE AS & A Level qualifications.

# The below points are important to consider when you are applying to Palestinian Universities:

- The year that students finish grade 12 at school and get their IGCSE, GCE AS & AL official equivalency from the ministry, **must be the same year** that they complete all equivalency requirements mentioned in section 1.
- Admission to Medicine at Al-Quds University requires 5 IGCSE subjects + 3 AL scientific subjects.
- The University's admission department **do not accept students** until they officially get their IGCSE, GCE AS & A Level transcripts accredited & authenticated by the department of equivalency of the Ministry of Higher Education & Scientific Research.
- The Palestinian ministry of education converts awarded grades to the following marks: (P. S. These are subject to changing)

IGCSE Level		GCE AS & A Level	
<b>A</b> *	98	<b>A</b> *	99
A	95	A	98
В	85	В	88
С	75	C	78
D	65	D	68
E	-	E	55

 Extra marks will be awarded to the student's final average in the case that he/ she passes extra AS/AL subject(s) as follows:

Level	If Grade A achieved	If Grade B achieved
Advanced Level	2 marks awarded	1 mark awarded



#### 3. Qualifications for universities worldwide

Cambridge qualifications are recognized by over 1,400 institutions in 195 countries, including some of the world's top-ranked universities. They are highly valued by both universities and employers worldwide, with prestigious institutions such as MIT, Harvard, Oxford, and Cambridge among those that accept them.

- Students use Cambridge International AS & A Levels to secure admission to leading universities across the UK, Ireland, USA, Canada, Australia, New Zealand, India, Singapore, Egypt, Jordan, South Africa, the Netherlands, Germany, and Spain.
- All UK universities accept Cambridge International AS & A Levels for admission.
- In the United States and Canada, strong grades in carefully selected Cambridge International A Level subjects can earn students up to one year of university course credit.
- Most undergraduate programs require 3 to 5 A Level subjects, along with a minimum grade C in IGCSE English and Mathematics.
- Some degree programs may prefer or require specific A Level subjects that are directly relevant to the chosen field of study.



## Where will the Cambridge qualification take you?

#### **Cambridge International AS & A Levels**

Cambridge International A Levels have formed part of the Cambridge qualifications framework for over 50 years and are widely recognized for entry into higher education. Good Cambridge International AS & A Level grades can be a key to admission to the world's major English-speaking universities. Cambridge International A Levels typically take two years to complete and offer a flexible course of study. With over 50 subjects to choose from, schools can offer almost any combination from the wide range of subjects available. Cambridge International AS Levels have half the content of the corresponding Cambridge International A Level and may be completed in one year. Cambridge International AS Level could be taken as a qualification in its own right, or as a stage on the way to a full Cambridge International A Level.

Students can study Cambridge International AS Level alongside other Cambridge International A Level subjects to increase breadth in the curriculum and build further knowledge and understanding.

Cambridge qualifications are accepted by universities all around the world. It is very important to remember that university entry is always competitive so achieving the minimum entry requirements is not a guarantee of admission; the higher your grades and the stronger your application documents, the better your chance of being accepted to your chosen programme.



#### **Worldwide recognition:**

We have listed some of the most popular study destinations for Cambridge students below.

Country	Enter Demoisses sets	English Language
Country	Entry Requirements	English Language
Australia	Three A Level passes at	The IELTS test is the most
	minimum grade C or above	common acceptable test
Canada	At least four Cambridge	All Canadian universities will ask
	International AS Level and/or at	for evidence of
	least two Cambridge	Language proficiency in either
	International A Level	English or French.
	qualifications	
Germany	Three academic, independent	Language proficiency
-	subjects at A Level with a	requirements (German or
	minimum grade C	English) are separately set by
		the universities.
UK	3 AL's accepted at grades A*-C	IELTS test
USA	C grade of above can help you	The most common English
	get up to 30 credit hours in	language proficiency tests
	American universities	required by universities are
		TOEFL and IELTS
Turkey	2-3 A level subjects at grade C	Language certificate of English /
	and above	Turkish (TOEFL / CAE /TÖMER)
Jordan	Pass at least six O-Levels and/or	For Arabic students one of the
3313.311	IGCSE/GCSE subjects (grades	eight subjects must be in Arabic
	A*-D), and two A-level subjects	language.
	(A-E)	ianguage.
Egypt	Two A-Level subjects OR Four	For Arabic students one of the
-3,72	AS-Level subjects OR One A-	subjects must be in Arabic
	Level subject and two AS-Level	language.
	subjects.	idi igaage.
	Jubjecu.	

#### **Demonstrating English Language Proficiency**

Cambridge IGCSE English as a First Language, Cambridge IGCSE English as a Second Language and/or Cambridge O Level English Language are accepted by many universities around the world as meeting English language proficiency requirements. We advise you to check the English language requirements of each university you are interested in applying to, before making any applications.

Universities may also require students to take another specific English language proficiency test such as TOEFL or IELTS if they are not an English native speaker.



### What are my Option Choices?

At Al-Mustaqbal School (AMS), we tailor our option blocks based on student preferences. While we strive to accommodate everyone's choices, we cannot guarantee that all students will be able to study their preferred subjects. Therefore, it is essential to carefully consider your options and select a path that aligns with your future goals, ensuring a fulfilling and rewarding career.

The **option selection form** included in this booklet is crucial. Please **read the instructions carefully** and complete the form accurately.

You will have dedicated teachers and supportive parents, but this stage of your education requires you to take greater responsibility for your learning. Make thoughtful choices and embrace this next phase of your academic journey.

We strongly encourage all students to use UNIFROG to explore their subject options. Visit the "Know-How Library" to read and watch materials on various topics related to your decision-making process.

#### **Entry Requirements**

To successfully enter **Year 11** at **Al-Mustaqbal School**, students must:

- Pass a minimum of 6 IGCSE subjects with at least a grade C.
- A grade D may be accepted only in a subject that is not chosen for A Level study.



## Making your choices

Selecting your courses can be challenging, but rest assured that support will be available to help you through this important decision-making process.

This booklet provides detailed information about all the subjects offered for Year 11 at Al-Mustaqbal School, starting in September 2025.

Your course selection will largely depend on your performance in Year 10 and the IGCSE exam results you achieve at the end of the year. It is crucial to choose subjects in Year 11 and 12 that you can excel in, ensuring you achieve strong grades.

Our goal is to place every student in the right course—one that is neither too difficult nor too easy. Striking the right balance will equip you with the skills and qualifications needed for your next step, whether that be further studies, university, or employment.

#### Factors to consider when making your choices

**Enthusiasm** —Try to pick subjects that you are most interested in. You'll probably be studying them for the next two years, so it is important to go for courses that you will stay interested in, from start to finish

**Strengths** – Consider choosing subjects that you are already doing well in. If you're getting on really well in a subject, it could be a sign that it is worth studying at a higher level in Year 11/12

**Breadth** – Give yourself the opportunity to develop a wide range of skills, they will support you in the future. Do not close too many doors at this early stage of your career choice.

**Diversified Assessment** - Think about whether you prefer subjects that involve only examinations, or a mix of exams and practical assessment. Studying courses that involves exams only can be sometimes harder, subjects that involve practical assessment usually open the space for wider assessment and give you the chance to reflect your practical skills in the taken subject(s).

**Future** — Research most useful subjects for the pathway you wish to follow. You should **first** decide on your study destination, **second**: research chosen university/ universities required/ preferred subjects from A Levels for the picked major, **third**: double check the needed number of AS & A Level subjects that you should have.



**Finally** - talk to the career advisor, subject teachers and parents about your choices. It's good to keep talking over and discussing what you are going to do, before you make your final choices. It doesn't mean that they can't be changed later, but it is much better to try and make sure that your options are right from day one.



## What subjects will I be studying in Y11 & Y12?

There are a number of subjects **all students will study.** These subjects are:

- English translation Class School requirement
- **Arabic** Advanced Level, with the exception of students who took the Arabic as a foreign language at the IGCSE level. However, if those who took Arabic as a foreign language picked subjects from the literary stream, the AL Arabic will still be a requirement in Y11
- Islamic Studies National Curriculum
- Mathematics AS & AL

#### You have the option to choose 3 options from the following:

- Biology
- Chemistry
- Physics
- Business
- IT
- Computer Science
- Environmental Management (AS Level only)
- Economics

Each course requires a minimum number of students to run, and this threshold varies by subject. While we strive to offer as many subjects as possible, there may be instances where you will need to take your second-choice subject instead.

Keep in mind that dropping a subject is only allowed under exceptional circumstances, so it is important to stay committed and give yourself time to adjust.

It is common for Year 11 students taking four A-Level or Level 3 courses to reduce their workload to three subjects in Year 12, though some students choose to continue with all four.

<sup>\*</sup> Please be aware that our timetable structure may sometimes prevent you from getting your first-choice subject in each block. For this reason, we strongly recommend selecting a backup option in case your first choice is unavailable.



## All students will choose $\underline{\text{at least 4 option subjects}}$ from the following:



**Biology** 



**Computer Science** 



Chemistry



**Physics** 



#### **Environmental Management**



**Mathematics** 



IT



**Business** 



**Economics** 



# **Option Subjects Information**

This is a brief on the subjects AMS offers for the academic year 2025-2027:

Subject	Component Options available	Basic Skills	
bridge international AS & A Level Mathematics (9709)	Advanced Subsidiary  (AS) Level:  Pure  Mathematics  Only (paper 1 & 2)  Pure  mathematics  and  Mechanics ( Paper 1 & 4)  Pure  Mathematics  and  probability  and statistics  (Paper 1 & 5)  Or  Advanced (A) Level:  Pure  Mathematics,	Pure Mathematics 1  1.1 Quadratics 1.2 Functions 1.3 Coordinate geometry 1.4 Circular measure 1.5 Trigonometry 1.6 Series 1.7 Differentiation 1.8 Integration Pure Mathematics 3  3.1 Algebra 3.2 Logarithmic and exponential functions 3.3 Trigonometry 3.4 Differentiation 3.5 Integration 3.6 Numerical solution of equations 3.7 Vectors 3.8 Differential equations 3.9 Complex numbers  Probability &	Pure Mathematics 2  2.1 Algebra 2.2 Logarithmic and exponential functions 2.3 Trigonometry 2.4 Differentiation 2.5 Integration 2.6 Numerical solution of equations  Mechanics  4.1 Forces and equilibrium 4.2 Kinematics of motion in a straight line 4.3 Momentum 4.4 Newton's laws of motion 4.5 Energy, work and power
Cambridge intern	Mechanics and probability and statistics (Papers 1, 3, 4 and 5)  Pure Mathematics and Probability and Statistics (papers 1,3,5 and 6)	5.1 Representation of data 5.2 Permutations and combinations 5.3 Probability 5.4 Discrete random variables 5.5 The normal distribution	6.1 The Poisson distribution 6.2 Linear combinations of random variables 6.3 Continuous random variables 6.4 Sampling and estimation 6.5 Hypothesis tests



<b>-</b>		Component 2	Component 3
I AS & A Level 0)		Reading and writing: Two passages in Arabic are set which deal with related themes.	<b>Essay:</b> A list of five topics, selected from the topic areas each year of examination.
tiona (9680	Advanced (A) Level:     Component 3.3.4.8. F.	Component 4	Component 5
Cambridge International AS & A Arabic (9680)	Component 2,3,4 & 5	Texts: Candidates answer three questions in Arabic. Each question must be on a different text, taken from the list corresponding to the year of examination.	Prose: Candidates translate a short passage from English into Arabic.
		AS Level	A Level
Cambridge International AS & A Level Biology (9700)	<ul> <li>Advanced (A) Level</li> <li>Paper 1,2,3,4 &amp; 5</li> <li>Advanced Subsidiary (AS) Level.</li> <li>Paper 1,2 &amp; 3</li> </ul>	1 Cell structure 2 Biological molecules 3 Enzymes 4 Cell membranes and transport 5 The mitotic cell cycle 6 Nucleic acids and protein synthesis 7 Transport in plants 8 Transport in mammals 9 Gas exchange 10 Infectious diseases 11 Immunity AS Level candidates also study practical skills.	12 Energy and respiration 13 Photosynthesis 14 Homeostasis 15 Control and coordination 16 Inheritance 17 Selection and evolution 18 Classification, biodiversity and conservation 19 Genetic technologies  A Level candidates also study practical skills.



# Cambridge International AS & A Level Chemistry (9701)

<ul> <li>Advanced (A</li> </ul>	A) Level
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- Paper 1,2,3,4 & 5
- Advanced Subsidiary (AS) Level.
  - Paper 1,2 & 3

#### **As Level Contents**

#### **Physical** chemistry

- 1 Atomic structure
- 2 Atoms, molecules and stoichiometry
- 3 Chemical bonding
- 4 States of matter
- 5 Chemical energetics
- 6 Electrochemistry
- 7 Equilibria
- 8 Reaction kinetics

#### Inorganic Chemistry

- 9 The Periodic Table: chemical periodicity
- 10 Group 2
- 11 Group 17
- 12 Nitrogen and sulfur

#### **Organic** Chemistry

- 13 An introduction to AS Level organic
- chemistry
- 14 Hydrocarbons
- 15 Halogen
- compounds
- 16 Hydroxy
- compounds
- 17 Carbonyl
- compounds
- 18 Carboxylic acids
- and derivatives
- 19 Nitrogen
- compounds
- 20 Polymerisation
- 21 Organic synthesis

#### Analysis

22 Analytical techniques

#### **A Level Contents**

#### **Physical Chemistry**

- 23 Chemical energetics
- 24 Electrochemistry
- 25 Equilibria
- 26 Reaction kinetics

#### Inorganic Chemistry

- 27 Group 2
- 28 Chemistry of transition elements

#### Organic Chemistry

- 29 An introduction to A Level organic chemistry
- 30 Hydrocarbons
- 31 Halogen compounds
- 32 Hydroxy compounds
- 33 Carboxylic acids and derivatives
- 34 Nitrogen compounds
- 35 Polymerisation
- 36 Organic synthesis

#### Analysis

37 Analytical techniques

A Level candidates also study practical skills.



		AS Level candidates also study practical skills.	
02)		As Level Contents	A Level Contents
vel Business (9609) Cambridge International AS & A Level Physics (9702)	<ul> <li>Advanced (A) Level</li> <li>Paper 1,2,3,4 &amp; 5</li> <li>Advanced Subsidiary (AS) Level.</li> <li>Paper 1,2 &amp; 3</li> </ul>	1 Physical quantities and units 2 Kinematics 3 Dynamics 4 Forces, density and pressure 5 Work, energy and power 6 Deformation of solids 7 Waves 8 Superposition 9 Electricity 10 D.C. circuits 11 Particle physics  AS Level candidates also study practical skills.	12 Motion in a circle 13 Gravitational fields 14 Temperature 15 Ideal gases 16 Thermodynamics 17 Oscillations 18 Electric fields 19 Capacitance 20 Magnetic fields 21 Alternating currents 22 Quantum physics 23 Nuclear physics 24 Medical physics 25 Astronomy and cosmology A level candidates also study practical skills.
(60		As Level Contents	A Level Contents
Cambridge International AS & A Level Business (96	<ul> <li>Advanced (A) Level</li> <li>Paper 1,2,3 &amp; 4</li> <li>Advanced Subsidiary (AS) Level:</li> <li>Papers 1 &amp; 2</li> </ul>	Business and its environment  1.1 Enterprise 1.2 Business structure 1.3 Size of business 1.4 Business objectives 1.5 Stakeholders in a business Human resource management 2.1 Human resource management 2.2 Motivation 2.3 Management Marketing 3.1 The nature of marketing 3.2 Market research 3.3 The marketing mix	Business and its environment 6.1 External influences on business activity 6.2 Business strategy  Human resource management 7.1 Organisational structure 7.2 Business communication 7.3 Leadership 7.4 Human resource management Strategy Marketing 8.1 Marketing analysis 8.2 Marketing strategy



		Operations management 4.1 The nature of operations 4.2 Inventory management 4.3 Capacity utilisation and Outsourcing Finance and accounting 5.1 Business finance 5.2 Sources of finance 5.3 Forecasting and managing cash flows 5.4 Costs 5.5 Budgets	Operations management 9.1 Location and scale 9.2 Quality management 9.3 Operations strategy  Finance and accounting 10.1 Financial statements 10.2 Analysis of published accounts 10.3 Investment appraisal 10.4 Finance and accounting strategy
Cambridge International AS & A Level IT (9626)	• Advanced (A) Level  • Paper 1,2,3 & 4  • Advanced Subsidiary (AS) Level  • Papers 1 & 2	As Level Contents  1 Data processing and information 2 Hardware and software 3 Monitoring and control 4 Algorithms and flowcharts 5 eSecurity 6 The digital divide 7 Expert systems 8 Spreadsheets 9 Modelling 10 Database and file concepts 11 Video and audio editing	12 IT in society 13 New and emerging technologies 14 Communications technology 15 Project management 16 System life cycle 17 Data analysis and visualisation 18 Mail merge 19 Graphics creation 20 Animation 21 Programming for the web



		As Level Contents	A Level Contents
Cambridge International AS & A Level Computer Science (9618)	• Advanced (A) Level • Paper 1,2,3 & 4 • Advanced Subsidiary (AS) Level • Papers 1 & 2	1 Information representation 2 Communication 3 Hardware 4 Processor Fundamentals 5 System Software 6 Security, privacy and data integrity 7 Ethics and Ownership 8 Databases 9 Algorithm Design and Problem-solving 10 Data Types and Structures 11 Programming 12 Software Development	13 Data Representation 14 Communication and internet technologies 15 Hardware and Virtual Machines 16 System Software 17 Security 18 Artificial Intelligence (AI) 9 Computational thinking and Problem-solving 20 Further Programming
Cambridge International AS & A Level Environmental (8291)	Advanced Subsidiary (AS)     Level ONLY     Paper 1 Principles of     Environmental Management     Paper 2 Management in     Context	Candidates for Cambridge International AS Level Environmental Management study the following topics:  1 Introduction to environmental management 2 Environmental research and data collection 3 Managing human population 4 Managing ecosystems and biodiversity 5 Managing resources 6 Managing water supplies 7 Managing the atmosphere 8 Managing climate change	



	As Level Contents	A Level Contents
• Advanced (A) Level Paper 1,2,3 & 4 • Advanced Subsidiary (AS) Level: Papers 1 & 2	Basic economic ideas and resource allocation 1.1 Scarcity, choice and opportunity cost 1.2 Economic methodology 1.3 Factors of production 1.4 Resource allocation in different economic systems 1.5 Production possibility curves 1.6 Classification of goods and services  The price system and the microeconomy 2.1 Demand and supply curves 2.2 Price elasticity, income elasticity and cross elasticity of demand 2.3 Price elasticity of supply 2.4 The interaction of demand and supply 2.5 Consumer and producer surplus	7.1 Utility 7.2 Indifference curves and budget lines 7.3 Efficiency and market failure 7.4 Private costs and benefits, externalities and social costs and benefits 7.5 Types of cost, revenue and profit, short-run and long-run production 7.6 Different market structures 7.7 Growth and survival of firms 7.8 Differing objectives and policies of firms
	Government microeconomic intervention 3.1 Reasons for government intervention in markets 3.2 Methods and effects of government intervention in markets	8.1 Government policies to achieve efficient resource allocation and correct market failure 8.2 Equity and redistribution of income and wealth 8.3 Labour market forces and government intervention



3.3 Addressing income
and wealth inequality

#### The macroeconomy

- 4.1 National income statistics
- 4.2 Introduction to the circular flow of income
- 4.3 Aggregate Demand and Aggregate Supply analysis
- 4.4 Economic growth
- 4.5 Unemployment
- 4.6 Price stability

- 9.1 The circular flow of income
- 9.2 Economic growth and sustainability
- 9.3Employment/unemployment
- 9.4 Money and banking

# Government macroeconomic intervention

- 5.1 Government macroeconomic policy objectives
- 5.2 Fiscal policy
- 5.3 Monetary policy
- 5.4 Supply-side policy
- 10.1 Government
  macroeconomic policy
  objectives
  10.2 Links between
  macroeconomic problems and
  their interrelatedness
  10.3 Effectiveness of policy
  options to meet all
  macroeconomic objectives

# International economic issues

- 6.1 The reasons for international trade
- 6.2 Protectionism
- 6.3 Current account of the balance of payments
- 6.4 Exchange rates
- 6.5 Policies to correct imbalances in the current account of the balance of payments
- 11.1 Policies to correct disequilibrium in the balance of payments 11.2 Exchange rates 11.3 Economic development 11.4 Characteristics of countries at different levels of development 11.5 Relationship between countries at different levels of development 11.6 Globalisation