



UNIVERSITY
OF LONDON

Programme Regulations 2024–2025

International Foundation Programme

International Foundation Certificate

Important document – please read
This document contains important
information that governs your
registration, assessment and
programme of study



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Important information regarding the Programme Regulations

Last revised: 29 February 2024

As a student registered with the University of London you are governed by the current General Regulations and Programme Regulations associated with your programme of study.

These Programme Regulations are designed and developed by University of London. The Programme Regulations will provide the detailed rules and guidance for your programme of study. Programme Regulations, together with the [Programme Handbook](#), will provide the detailed rules and guidance for your programme of study.

In addition to Programme Regulations you will have to abide by the [General Regulations](#). These regulations apply to all students registered for a programme of study with the University of London and provide the rules governing registration and assessment on all programmes; they also indicate what you may expect on completion of your programme of study and how you may pursue a complaint, should that be necessary. Programme Regulations should be read in conjunction with the General Regulations.

The relevant General Regulations and the Programme Regulations relating to your registration with us are for the current year and not the year in which you initially registered.

On all matters where the regulations are to be interpreted, or are silent, our decision will be final.

Further information about your programme of study is outlined in the Programme Specification which is available on the relevant Courses page of the website. The Programme Specification gives a broad overview of the structure and content of the programme as well as the learning outcomes students will achieve as they progress.

Terminology

For the International Foundation Programme you should note the following terminology:

Module: Individual units of the Programme are called modules. Each module is a self-contained, formally structured learning experience with a coherent and explicit set of learning outcomes and assessment criteria. In 2021-22 and before modules were referred to as courses.

If you have a query about any of the Programme information provided please contact us via the *Ask a Question* button in the [Student portal](#).

Changes to the International Foundation Programme Regulations 2024-2025

The following changes have been made to the Programme Regulations 2024-2025:

- FP0011 Biology and FP0012 Chemistry are assessed by a two-hour unseen written exam (80%) and a one-hour unseen written exam (20%).
- FP0006 Sociology has been withdrawn.

1 Programme overview

1.1

The International Foundation Programme consists of four modules from the following options:

- FP0001 Mathematics and Statistics
- FP0002 Economics
- FP0003 International Relations
- FP0004 Politics
- FP0005 Social Psychology
- FP0007 Pure Mathematics
- FP0008 Accounting and Finance
- FP0009 Law
- FP0010 Business Management
- FP0011 Biology
- FP0012 Chemistry
- FP0013 Statistics for STEMM

Module information including the module description, topics covered, learning outcomes, assessment and essential reading, can be viewed on the [Programme structure webpage](#).

Choice of modules

To find out which module options are available at your chosen Recognised Teaching Centre, you should contact them directly. Not all modules are available at all Recognised Teaching Centres.

1.2

Once you are registered for the International Foundation Programme we may allow you to change your choice of module options. You may not change your choice of module options if you:

- are already eligible for the award; or
- have entered the examination for a module you want to change. In exceptional circumstances, you can be permitted to change a module after entering for an examination, at the discretion of the Programme Director.

Recognised Teaching Centres permitted to teach the University of London International Foundation Programme can be found in the [Directory of Recognised Teaching Centres](#).

Attendance requirements

1.3

You are required to attend a full- or part-time course of instruction at a Recognised Teaching Centre approved to teach the International Foundation Programme. You must comply with the Recognised Teaching Centre's attendance and coursework requirements, except in the following circumstances:

- when you are resitting a written examination; or

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- where the University has used its discretion to waive the requirements in special cases, on grounds of illness or any other cause that has been judged adequate.

1.4

Recognised Teaching Centres provide us with annual attendance records for all students. If your attendance record is unsatisfactory, we will refuse permission for you to sit one or more written examinations, and you will have to pay an examination re-entry fee to enter for exams in a later year. You will be required to attend a Recognised Teaching Centre in a later year and ensure your attendance record is satisfactory.

Individual modules

1.5

All IFP modules are available for study on a stand-alone basis, subject to availability. If you register for an individual module you are required to attend a Recognised Teaching Centre as set out in regulations 1.4.

1.6

You may take a maximum of one module on a stand-alone basis without being registered for the full programme.

Further details on Individual modules can be found in [Section 7](#).

2 Registration

Effective date of registration

2.1

Your effective date of registration will be 1 September in the year that you initially registered. This allows you to sit your examinations in the following May.

Period of registration

2.3

If you start by taking an individual module and then register for the IFP we will give you a new maximum period of registration.

Details of minimum and maximum periods of registration can be found in the Programme Specification.

3 Recognition of Prior Learning and Credit transfer

Recognition of Prior Learning (RPL) is a generic term for the process by which we recognise and, where appropriate, award credit for learning that has taken place at the University of London, or elsewhere, before entry onto a Programme of study.

3.1

No credit transfer or recognition of prior learning (RPL) is allowed for students who register on the International Foundation Programme.

4 Assessment for the Programme

Sitting written examinations

4.1

You must meet the attendance requirements to be allowed to enter the written examination for any module.

Please see regulations [1.4 -1.5](#) for more information on attendance requirements.

Number of modules

4.2

When you enter for written examinations, you may enter for a maximum of four modules.

Date of written examinations

4.3

Written examinations take place in May each year. You will receive an Admission Notice approximately two weeks before the written examinations are scheduled to take place.

Assessment methods

4.4

All International Foundation Programme module are examined by one two-hour fifteen minute unseen written examination, except for FP0011 Biology and FP0012 Chemistry, which are assessed by a two-hour unseen written examination (80%) and a one-hour unseen written examination (20%).

FP0001 Mathematics and Statistics

4.5

The written examination paper for *FP0001 Mathematics and Statistics* consists of two equal sections: one section for Mathematics and one section for Statistics. You will receive a mark for each section and a combined final mark for the module.

4.6

You must achieve a mark of 40 or above for **each section** of the written examination paper for *FP0001 Mathematics and Statistics* to pass the module. If you achieve a mark of 39 or less in one or both sections you will fail the module and you will need to resit the written examination.

Important note: We will not accept an average of the marks from each section of *FP0001 Mathematics and Statistics* examination paper as a Pass if you have scored 39 or less in one section.

Number of attempts permitted

4.7

You have a maximum number of three attempts at the written examination for each module.

4.8

If you have not yet met the conditions for an award, you can resit a failed assessment up to the permitted maximum number of attempts, as long as your registration has not expired and you have met the attendance requirements.

Resitting examinations

4.9

There is a resit examination session held in July each year. Students who have failed a maximum of one examination from their total modules in an Academic Year, will be invited to a resit at the discretion of the Board of Examiners. Resit invitations will be sent in mid-June.

The July resit session is not compulsory. You may choose to resit your failed examination in line with regulation 4.13 below.

4.10

If you fail more than one module, you will have to wait until the following May to resit your exams.

4.11

If you fail a module, you may either resit it at any point within your maximum period of registration and examination attempts or substitute the failed course for an alternative module option.

4.12

If you substitute a failed module for an alternative course, you will be required to pay a fee and must study the whole syllabus for the new module before you can sit the exam.

4.13

You can resit up to four written examinations from previous years in the May examination session.

4.14

You will not be able to resit a module which you have passed.

Examination fees

4.15

If you complete examination entry for a module but are then absent from the examination, you will be required to pay an examination re-entry fee for all subsequent examination entries for that module.

- If you complete examination entry for a module but are subsequently not allowed to sit the examination due to not meeting the attendance requirements, you will be required to pay an examination re-entry fee for all subsequent examination entries for that module.
- If you fail an examination, you will be required to pay an examination re-entry fee for any subsequent examination entries for that module.

Materials and aids allowed in the examination room

4.16

The use of rulers during the written examination is strictly controlled. Where use of a ruler is allowed, the detailed specification is given on the Permitted Materials List.

Calculators

4.17

The use of calculators during the written examination is strictly controlled. Where use of a calculator is allowed, the detailed specification is given on the Permitted Materials List.

4.18

We will not provide calculators. In examinations that permit their use, you are responsible for providing your own calculator, making sure that it meets the conditions set out below and is in working order for the examination. You should make sure that you have a spare calculator (which also meets the conditions set out below) in case your calculator fails during the examination, or you must be prepared to continue the examination without a calculator.

You are encouraged to show the examiners the steps taken in arriving at the answer to demonstrate understanding of the material as opposed to simply writing down the result from a calculator display.

4.19

You may not store information in the memory of your calculator.

4.20

If you are allowed to use a calculator in an examination, you may use any standard non-graphing scientific calculator for your calculations, but you may not use any computer software or program to obtain or graph solutions. Credit will only be given if all workings are shown.

4.21

If you are allowed to use a calculator in an examination, calculators must not have any feature that enables communication, either inside or outside of the examination venue.

4.22

If you use a calculator in an examination, you must write the name and type of calculator you used on your examination script. If you use a non-approved calculator you may be considered to have committed an assessment offence.

4.23

You are not allowed to borrow another student's calculator during the examination.

4.24

Calculators must be hand-held; compact; portable; solar and/or battery-powered; quiet in operation and have no external wires.

4.25

Calculators that meet the requirements above may be brought into the examination hall and used for the following module:

- FP0001 Mathematics and Statistics
- FP0002 Economics
- FP0007 Pure Mathematics
- FP0008 Accounting and Finance
- FP0011 Biology
- FP0012 Chemistry
- FP0013 Statistics for STEMM

5 Scheme of award

5.1

To be considered for the award of the International Foundation Certificate you must have attempted and passed the assessment for four modules.

5.2

The International Foundation Certificate is awarded with Distinction, Merit or Pass. You will also receive percentage marks for each module.

5.3

All modules are weighted equally. For each module you will receive a numerical mark and the corresponding grade. The grading for each module is as follows:

Mark	Grade
70+	Distinction
60-69	Merit
40-59	Pass
30-39	Marginal fail
0-29	Fail

5.4

The International Foundation Certificate is awarded with an overall Pass, Merit or Distinction.

5.5

The International Foundation Certificate is only awarded with Distinction or Merit if completed with a maximum of one resit. If completed with more than one resit, either for one module, or for resits in two or more modules, an overall Pass grade is awarded. In exceptional circumstances a grade higher than a pass can be permitted, at the discretion of the Programme Director.

5.6

The minimum requirements for the grading scheme are as follows:

Distinction – awarded to students who have achieved one of the following sets of marks:

three marks of 70 or above and one mark of 40 or above

two marks of 70 or above and two marks of 60 or above

Merit – awarded to students who have achieved one of the following sets of marks:

three marks of 60 or above and one mark of 40 or above

one mark of 70 or above, one mark of 60 or above, one mark of 50 or above, and one mark of 40 or above

two marks of 60 or above and two marks of 50 or above

Pass – awarded to all students who are eligible for award of an International Foundation Certificate as described in [5.1](#) above but not eligible for the award with Distinction or Merit.

5.7

All individual module assessments are marked and graded according to the assessment criteria for the International Foundation Programme.

6 Progression and transfer to a higher qualification

Progressing to a qualification at levels 4, 5 and 6 of the FHEQ through the University of London

6.1

If you successfully complete the International Foundation Programme, you will meet the General Entrance Requirements for most of the undergraduate Programmes offered by the University of London. Some Programmes have Programme-specific requirements and you will also need to meet these requirements.

6.2

If you successfully complete the International Foundation Programme and then progress to another Programme offered by the University of London, you will not carry any credit for the modules passed.

6.3

On completion of the International Foundation Programme, you can only apply to progress to another Programme offered through the University of London in the next available registration session.

Transferring to a higher qualification through the University of London

6.4

If you end your registration for the International Foundation Programme without passing all four modules and without receiving an award, you may still be considered for transfer to a Programme offered through the University of London. If the Programme has an attendance requirement, you also need to be accepted by a Recognised Teaching Centre that is recognised to teach the Programme.

7 Individual modules

7.1

The following credit-bearing individual modules from the International Foundation Programme may be studied on a stand-alone basis:

- FP0001 Mathematics and Statistics
- FP0002 Economics
- FP0003 International Relations
- FP0004 Politics
- FP0005 Social Psychology
- FP0007 Pure Mathematics
- FP0008 Accounting and Finance
- FP0009 Law

- FP0010 Business Management
- FP0012 Chemistry

7.2

You may take a maximum of one individual module without being registered on the full IFP qualification.

7.3

Each individual module will normally be examined by one two-hour fifteen minute written examination.

7.4

The maximum number of attempts permitted at any assessment for an individual module is three.

7.5

When you enter for written examinations, you may enter for one module.

Progression and transfer to a higher qualification

If you request to transfer from standalone individual modules to the Certificate and are currently undertaking the study for the module, transfer of registration cannot take place before results for this session are confirmed by the exam board.

7.6

If you apply to progress to the International Foundation Programme and this is approved, you may be credited with any individual modules successfully completed.

7.7

Credit for an individual module may be considered provided that an application is made within three years of the completion of the relevant module.

7.8

A mark awarded for completion of an individual module may not be used to replace any mark for a certificate already awarded.

7.9

Successful completion of an individual module may partially or fully meet the entrance requirements for an undergraduate programme. Some Programmes have Programme-specific requirements and you will also need to meet these requirements.

Appendix A: Module outlines

Full module descriptions are published on the [Programme Structure page](#) of the website.

Mathematics and Statistics (FP0001)

Topics covered

- Arithmetic and algebra: The mathematics part of the course begins with a review of arithmetic (including the use of fractions and decimals). The manipulation of algebraic expressions (including the use of brackets and the power laws). Identities, equations and inequalities. Solving linear and quadratic equations. Solving simultaneous linear equations.
- Functions: Some common functions (including polynomials, exponentials, logarithms and trigonometric functions) and their graphs. Inverse functions and how to find them (if they exist). The laws of logarithms and their uses.
- Calculus: The meaning of the derivative and how to find it (including the product, quotient and chain rules). Using derivatives to find approximations and solve simple optimisation problems with economic applications. Curve sketching. Integration of simple functions and using integrals to find areas.
- Financial mathematics: Percentages and compound interest over different compounding intervals. Arithmetic and geometric sequences. The sum of arithmetic and geometric series. Investment schemes and ways of assessing the value of an investment.
- Data exploration: The statistics part of the course begins with basic data analysis through the interpretation of graphical displays of data. Univariate, bivariate and categorical situations are considered, including time series plots. Distributions are summarised and compared and their patterns discussed. Descriptive statistics are introduced to explore measures of location and dispersion.
- Probability: The world is an uncertain place and probability allows this uncertainty to be modelled. Probability distributions are explored to describe how likely different values of a random variable are expected to be. The Normal distribution is introduced and its importance in statistics is discussed. The concept of a sampling distribution is explored.
- Sampling and experimentation: An overview of data-collection methods is followed by how to design and conduct surveys and experiments in the social sciences. Particular attention is given to sources of bias and conclusions that can be drawn from observational studies and experiments.
- Fundamentals of regression: An introduction to modelling a linear relationship between variables. Interpretation of computer output to assess model adequacy.

Assessment: Unseen written exam (Two-hours 15 minutes).

Economics (FP0002)

Topics covered

- The nature and scope of economics: This unit provides a broad introduction to the study of economics and its main lines of inquiry. The focus is mainly on the basic economic problem of choice and scarcity, and the concept of opportunity cost. You are required to use standard production possibility frontiers to illustrate simple applications of the problem to various real-life situations.
- Competitive markets: This unit examines how the price mechanism allocates resources in different markets through the demand and supply model. It introduces the concepts of elasticities and social welfare. You should be able to use the model to illustrate changes in factors influencing the price of commodities (for example, consumer taste and cost of production).

- **Market failure and government intervention:** This unit considers a range of reasons why market forces may not be able to allocate resources efficiently. These include externalities, public goods, asymmetric information, factor immobility and market power. It examines possible government interventions and critically assesses their effectiveness. The unit is taught mainly through specific case studies (for example, pollution and congestion charges).
- **Managing the economy:** This unit provides an introduction to key measures of economic performance and the main objectives and tools of economic policy. A basic model of aggregate demand and aggregate supply is used to represent unemployment and inflation, as well as the effectiveness of government interventions.
- **Development and sustainability:** This unit focuses on the meaning and measures of economic development (for example, the Human Development Index and Gross Domestic Product per capita). You should be able to identify common and diverse features of both developed and developing economies, as well as understand why development must be sustainable.
- **Economic impact of the Covid-19 pandemic:** This unit considers the economic impact of the Covid-19 pandemic, with a focus on short-run economic effects of the pandemic, long-run economic consequences and policy responses to the pandemic. By the end of this unit, you should be able to explain the short-run and long-run economic impact of the Covid-19 pandemic, and also state and explain economic policy responses to the pandemic.

Assessment: Unseen written exam (Two-hours 15 minutes).

International Relations (FP0003)

Topics covered:

- **Unit One – States, nations, and countries:** This unit introduces students to regional and global issues facing International Relations (IR). The six sections cover basic IR concepts and essential information about different parts of the world. This gives students empirical knowledge they will need to engage with issues facing regional and global international societies. By the end of this unit, students should be able to define key concepts; identify the world's states on a political map and discuss their power; identify major physical features and socio-cultural divisions of regions; and comment on basic elements of international societies.
- **Unit Two – Four models of IR:** The aim of this unit is to provide students with the theoretical tools needed to analyse world events. It introduces four different ways of understanding international events at the global and/or regional scale, defining key terminology and assessing the ability of each approach to inform our understanding of specific issues in International Relations. By the end of this unit, students should be able to: explain the main arguments of the English School, Liberalism, Realism, and Marxism; define important terms and concepts associated with each theory, and use each set of arguments to explain an international event.
- **Unit Three – Analysing regional issues:** This unit asks students to use Unit Two's theoretical tools to analyse regional issues in IR. Its aim is to discuss the context behind regional issues; to consider them from four different theoretical perspectives, and to use the resulting information to analyse events. By the end of this Unit, students should be able to explain the context of each issue; consider its implications for English School, Liberal, Realist, and Marxist theory, and use different theoretical perspectives to analyse ongoing events.
- **Unit Four – Global issues in international society:** This unit asks students to analyse key international issues at a global scale, using IR theories and concepts to explain context and evaluate proposed solutions. By the end of this unit students should be able to: explain the context of the issue under discussion; trace its impact on global international society; use IR theories to propose solutions to each issue and evaluate proposed solutions on the basis of their empirical and theoretical assumptions.

Assessment: Unseen written exam (Two-hours 15 minutes).

Politics (FP0004)

Topics covered:

- **Introducing Politics and Political Thought:** This unit introduces the study of politics and the main streams of political thought. It outlines the different ways that politics can be defined and challenges students to think about the different ways that politics can be studied. Key schools of political thought are introduced. Sections covered: What is politics?, Studying politics, Political Thought.
- **States, Nations and Regimes:** This unit provides students with the tools to recognise both the large-scale trends which led to the global rise of the nation-state, as well as how different political patterns of rule have evolved. Sections covered: States and Regimes, Nations and Nationalism, Democratic Regimes, Authoritarian Regimes.
- **Representation and Government:** This unit explains how government in modern democracies is based on the principle of representation. Sections covered: Representation and political parties, Elections, Assemblies, Political executives.
- **Economy and Society:** This unit explores the ways in which society and economy interact with the state. Sections covered: Political Participation and Movements, States and Markets, Multilevel governance and Subnational Politics, Globalization.
- **Public Policy and Administration:** This unit provides students with an understanding of the main institutions and organisations that intervene in the policymaking process. Sections covered: Bureaucracy, Public Policy, Armed forces, Interest groups.

Assessment: Unseen written exam (Two-hours 15 minutes).

Social Psychology (FP0005)

Topics covered

The course introduces students to key issue areas of Social Psychology, outlining how key researchers have contributed to the development of theory. These issues areas are also used to briefly describe the role of research methods in social psychological research.

- **Overview: The self in social context:** Students are introduced in this module to key concepts, theories and methodological approaches specific for the study of self. These include the self-concept, self-awareness, self-perception and social comparison, self-esteem and impression management.
- **Interpersonal relations:** Students are introduced in this module to key concepts, theories and methodological approaches to the study of interpersonal relations. These include attachment theory, social exchange and equity theory, factors of attraction and the interpretation of the behaviour of others.
- **Group and inter-group relations:** This module introduces students to key concepts, theories and methodological approaches regarding groups and inter-group relations. These include group norms and roles, social facilitation and social loafing, theories of prejudice and intergroup collaboration.
- **Cultural phenomena:** In this module, students are introduced to key concepts, theories and methodological approaches related to culture and cultural phenomena. These include cultural experiences of the self, aggression, prosocial behaviour and culture, attribution and culture, and inter-cultural communication.

Assessment: Unseen written exam (Two-hours 15 minutes).

Pure Mathematics (FP0007)

Topics covered

- Logic, Proof and Sets: Mathematical statements and proof. Some basic logic. Quantifiers and proof by contradiction. Set notation and operations on sets.
- Algebra: Polynomial division. The factor and remainder theorems. Solving polynomial equations. The relationship between the roots of a polynomial and its coefficients. Partial fractions. The binomial theorem.
- Trigonometry: Trigonometric functions and the Pythagorean identities. The compound angle formulae. Using trigonometric identities to simplify and evaluate trigonometric expressions. Solving trigonometric equations.
- Calculus: Differentiating implicitly defined functions. Integration by substitution. Integration by parts. Using trigonometric identities and partial fractions in integration.
- Differential Equations: Separable and linear first-order differential equations with some applications.
- Coordinate Geometry: Conic sections. Tangents and normals. Parametric equations and using them to find gradients.
- Vectors: Vector addition and scalar multiplication. The dot product and the angle between two vectors. The vector equation of a straight line. Normal vectors and planes. The Cartesian and vector equations of a plane.

Assessment: Unseen written exam (Two-hours 15 minutes).

Accounting and Finance (FP0008)

Topics covered

- Introducing financial reporting: What is accounting? Forms of business organisation, concepts. Income statements and statements of financial position.
- Preparation of financial accounts: Double-entry bookkeeping: accounting for business transactions. Adjustments: accruals, prepayments, bad debts and provisions. Adjustments: depreciation, disposal of non-current assets, revaluation. Inventory and cost of goods sold.
- Other financial accounting issues: Liabilities. Equity. Internal control: bank reconciliations, control accounts and suspense accounts. Incomplete records. Partnership accounting. Cash flow statements.
- Interpretation of financial accounts: Published financial statements and auditing. Interpretation of financial statements.
- Management accounting and finance: Management accounting introduction: the meaning of 'cost'. Contribution, break-even analysis and limiting factors. Absorption costing. Budgeting and cash flow forecasting. Standard costing and variances. Capital investment appraisal.

Assessment: Unseen written exam (Two-hours 15 minutes).

Law (FP0009)

Topics covered

- Studying law. This sets the foundations for subsequent units. It considers the nature of law and why societies develop rules to enable people to live peaceably. It sets out the features that distinguish legal rules from rules of custom or morality. It also classifies English law and explains the role of the judiciary in the English legal system.

- Sources of law. In the English legal tradition, the source of a rule determines its significance and whether it might take precedence over another source (such as the UK Parliament / EU law). This unit introduces the sources of law and their significance. See how the English legal system assembled various local customs into one standardised system - the Common law.
- Precedent and Statutory Interpretation. This unit explains the operation of the doctrine of judicial precedent in the common law. The doctrine shows that legal principles made by judges in the higher courts bind all courts below in future cases of similar fact and in some circumstances, the rules of precedent require courts to follow their own previous decisions.
- Overview of criminal liability and the criminal justice system. This unit introduces the general principles of criminal liability, including what is meant by a crime. It examines the objectives of civil and criminal courts and the aims of sentencing. This unit will help you produce case notes, both as a means of learning legal principles and for preparing for the exam.
- Introduction to contract law. This unit explains how contractual terms are classified and the difference between express and implied terms. Explore the requirements for a legally binding agreement and the consequences of a breach of contract. The unit should enable you to identify legal issues in problem scenarios and apply the rules of contract law.
- Tort law. An introduction to Tort law and, specifically, the tort of negligence. Discover the aims of tort law and the types of harm for which it provides compensation. Examine the elements of a claim in negligence and the operation of the doctrine of precedent to apply and further consolidate the legal skills you have developed.

Assessment: Unseen written exam (Two-hours 15 minutes).

Business Management (FP0010)

Topics covered:

- Unit One: What is Business? This unit introduces students to the different types of businesses that exist, to the reasons why they operate, to the groups of people who have an interest in businesses and how profits are calculated. This unit provides knowledge and understanding on which later units will build.
- Unit Two: The Business Environment This unit aims to give students an understanding of some of the key components of the environment in which businesses operate. It focusses on the changes that take place in these elements of the business environment. This provides a basis for further study in later units.
- Unit Three: Managing Resources This unit looks at the ways in which businesses can seek to manage human and physical resources efficiently in a changing environment. It considers the ways in which businesses measure their efficiency and key actions they can take to improve efficiency.
- Unit Four: Making effective marketing decisions This unit looks at ways in which businesses can be successful in selling their products in markets. It will consider the importance of understanding customers and markets through market research. It will also examine the importance of using marketing information to help businesses to target particular groups of customers and to understand changes in the business environment. Finally, it will consider a limited range of marketing tactics available to businesses to improve their performance.
- Unit Five: Choosing Appropriate Strategies This unit looks at the strategies that businesses can use to achieve their aims and objectives in a changing environment. It considers how businesses decide on their strategies, the strategic options that are available and how leadership may impact on implementing strategy.

Assessment: Unseen written exam (Two-hours 15 minutes).

Biology (FP0011)

Topics covered

- **Variation and Disease in Vertebrate Systems:** This unit starts by looking in detail at familiar anatomy in the body; bones, muscles and other organ systems which make up the structure of living things. Starting with human anatomy before moving onto other vertebrates, it covers the key systems and highlights organs which are essential to understand for future medical, veterinary and biotechnological careers. For each system, the function and organs are described, before looking in more detail at the underlying mechanisms. Moving on from human examples, we consider variations in each system between vertebrate groups, highlighting notable examples of differences. Finally, healthy system function is compared to common disorders. Potential treatments are explained as a basis for understanding medical innovations.
- **Interactions between organisms and their environment:** This module is about how living things remain healthy and stay alive. It covers interactions between organisms and their environment, describing and explaining the external factors required for health, and potential consequences if those factors are absent. The implications of toxins, pollutants, parasites or pathogens being introduced to a living system are discussed. Essential requirements for health are linked to healthcare responsibilities in medical and veterinary contexts. Finally, the factors required for health are related to the wider context in terms of environment and society.
- **Adapted Species:** This module is about the range of living things that exist. It covers biodiversity, evolution and speciation, giving candidates an overview of phylogeny through looking at integument, skeletal, tissue and molecular level examples of adaptation. Scientific enquiry and respect for evidence are addressed through presenting case studies, ranging from paradigm shifts elucidated by key historic scientists through to modern medical antimicrobial resistance examples of evolution in action. Natural selection and artificial selection for domestication are compared, and students should be aware of the advantages and issues in pedigree breeding. This wider view of artificial selection sets the scene for understanding Unit 5: Genetics and Biotechnology.
- **Dynamic Cells:** This module is about the different types of cell, and the processes which go on inside them. Students will gain understanding of the range of cell types, and their essential organelles and functions. They will be introduced to immunology through understanding cells involved in immunity cascades. The module covers cell membrane diffusion and phospholipid bilayer processes, illustrating the crucial importance of substrates, enzymes and ions in cellular metabolic processes. Students will learn how mitochondria are responsible for energy release. They will also learn about communication within and between cells, including hormonal communication. They will know examples of cellular metabolism abnormalities and link this to treatment implications.
- **Genetics and biotechnology:** This module is about DNA, RNA and protein synthesis. Students will understand the structure of cell nuclei, and will focus on the composition of nucleic acids. They will learn how base-paired nucleotides make up the double helix molecule (DNA) or single strand of nucleotides (RNA). Students will learn that DNA composes the genotype and determines the phenotype of organisms, together with the environment. They will learn how DNA is replicated and this will be related to prior learning about reproduction in unit 1. Section 4 focuses on biotechnology and current innovations. Students will understand problems which

can occur during nucleic acid replication, learn about medical and veterinary treatments, and consider ethical debates in this field. Specific objectives focus on:

Assessment: One two-hour unseen written exam (80%); one one-hour unseen written exam (20%).

Chemistry (FP0012)

Topics covered

- **The Fundamental Principles of Chemistry:** The first module is designed to equip students with the fundamental principles required to understand chemistry at an atomic level. It is through these rules that the elements combine (react) to produce all matter. The complexity in chemistry can be reduced to these fundamental principles which is why the course starts here. The models described are state-of-the-art and provide the easiest to grasp explanations. This unit underpins the rest of the course.
- **Energy, Reaction Dynamics and Inorganic Materials:** A large part of chemistry investigates what happens when chemical species (elements, molecules, mixtures) react with each other. This unit focuses on the energetics of these reactions, and the resultant physical and mathematical analyses that can be used to understand reactions fully.
- **Organic Chemistry:** Organic chemistry is a core aspect of degree level chemical studies but is also relevant to many surrounding disciplines (for example biochemistry, medicine, pharmacy, nutrition). This unit describes the basic principles of organic chemistry. Specifically, it covers how chemists depict and name organic molecules; It highlights the importance of functional groups in molecular function and synthesis; and, it highlights the importance of organic chemistry both to industry and life itself.
- **Analytical Chemistry:** Analytical chemistry is essential both to further study in chemistry and other related courses like medicine and forensics. This unit is designed to place all relevant analytical techniques used in chemistry in one location within the course. This provides clarity to the student and gives a comprehensive resource that can be accessed by other relevant courses that make use of chemical analytical techniques. The fundamental principles on which each analytical technique is based is given in connection to a particular technique's practical application and real-world usage.
- **Applied Chemistry:** The excitement in chemistry comes from its many uses throughout our modern world. This unit provides an overview of several highly relevant sectors. It provides a chemical window for the student on a number of current technological developments and challenges in the pharmaceutical, environmental, energy, and biochemical sectors.

Assessment: One two-hour unseen written exam (80%); one one-hour unseen written exam (20%).

Statistics for STEMM (FP0013)

Topics covered:

- **Descriptive Statistics and data visualisation:** In this unit, students gain an understanding of the fundamentals of descriptive statistics, including measures of central tendency and dispersion. The module introduces them to the creation of graphical displays of univariate data and exploring bivariate data. Practical sessions involve using SPSS for data analysis, enhancing students' ability to calculate and interpret common descriptive statistics.
- **Probability and distribution theory:** Building on foundational knowledge, this unit explores probability theory, random variables, and various probability distributions. Students learn about common discrete and continuous probability distributions, as well as sampling distributions of statistics. The goal is to equip them with the skills to compute probabilities, including conditional probabilities, and confidently work with probability and sampling distributions.
- **Statistical Inference:** An introduction to statistical inference, covering point and interval estimation, hypothesis testing principles, and common statistical tests for means and proportions. Students learn to construct and interpret confidence intervals, as well as perform a range of hypothesis tests. Emphasis is placed on understanding the appropriate use of each type of test, providing students with a solid foundation for making informed statistical inferences.
- **Modeling relationships between variables:** this unit introduces statistical methods for modeling relationships between variables, both categorical and measurable. Topics include contingency tables, the chi-squared test, correlation coefficients, and simple linear regression. Practical application of statistical inference in SPSS is covered, enabling students to model relationships between variables and conduct various statistical inference procedures.

Assessment: Unseen written exam (Two-hour 15 minutes).

Appendix B: Assessment Criteria

Mark	Grade	Characteristics
70 - 100	Distinction	<ul style="list-style-type: none"> • Demonstrates an excellent grasp of the relevant knowledge base. • Answer is consistently informed by the major conventions and practices of the area of study, with high levels of breadth and depth. • Clearly demonstrates excellent, or outstanding, understanding of the different perspectives or approaches associated with the area of study. • Evidence of excellent, or outstanding, analysis and discussion. • Evidence of the ability to answer more unusual or demanding questions, involving application of in-depth and advanced understanding of the subject and its methods. • Excellent, or outstanding, presentation and structure.
60 - 69	Merit	<ul style="list-style-type: none"> • Demonstrates a very good grasp of the relevant knowledge base. Answer is generally well informed by the major conventions and practices of the area of study. • Demonstrates wide and accurate understanding of the different perspectives or approaches associated with the area of study. With good breadth and depth. • Evidence of very good analysis and discussion. • Evidence of the ability to solve some of the more unusual or demanding questions involving the use of significant understanding of the subject. • Very good levels of consistency and accuracy.
40 - 59	Pass	<ul style="list-style-type: none"> • Evidence of a basic understanding and competence in the subject. Some knowledge and application of relevant methods and techniques. • Basic analysis on a standard range of information and knowledge, with some inaccuracy. • Evidence of essential reading and acceptable quality of presentation and structure. • Demonstrates ability to address standard problems, but does not show evidence of significant, in depth understanding of the subject.
30 - 39	Marginal fail	<ul style="list-style-type: none"> • Superficial coverage of questions that is highly descriptive. Contains serious omissions and/or significant errors. • Some understanding evident, but shows no ability to present anything other than very basic and simplistic answers. • Disorganised in structure and poor clarity of expression. • Limited evidence of reading or thought of an appropriate nature. • Limited competence in core basic techniques of the subject area or competence only in a small part of the module material.
0-29	Fail	<ul style="list-style-type: none"> • No information or very little information presented. Almost entirely inaccurate information. No evidence of understanding. • No evidence or very little evidence of reading of appropriate and relevant material. No competence or limited competence in core basic techniques of the subject. • Poor, or extremely poor, structure. Lack of direction and clarity. No evidence of understanding of the basic syllabus.