ALMUÑECAR INTERNATIONAL SCHOOL

Year 12

Curriculum

2025-26

Contents

English Language English Media English Literature Pure Mathematics Statistics Mechanics Biology Chemistry Physics

Global Perspectives French Business Studies Sports Science Art Spanish A Level Spanish Spanish ELE AS

Geography Computer Science PCE Mathematics Puras PCE Biologia PCE Matemáticas Aplicadas PCE Historia del Arte

PCE Fundamentos del Arte PCE Economía PCE Quimica

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2025-26 Contents

Subject: English Language AS/A Level **Cambridge 9093**	Year group: 12	Teacher: Mr Burrow
No. of lessons per week: 5 ***CONSISTENT, REGULAR PEER AND SELF ASSESSMENT, FEEDBACK FROM TEACHER EVERY LESSON***	Date: **2025-26**	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
Approx. 2 or 3 chapters per month	Unit 1: Introduction to AS and A Level course **Recommended prior knowledge** A competence of written English, demonstrated through success at O Level/IGCSE and a basic understanding of the linguistic features of a range of texts.	**Context** This unit is the introduction to the course and gives an overview of the skills needed to analyse texts, both written and spoken, and to write them. It should be the first unit studied. The unit re-visits skills, concepts and interests developed at O Level/IGCSE, and introduces ideas of spoken language to add to the analysis of texts in a variety of written forms. The repertoire of writing for different purposes/audiences, using different forms, is extended through the study of a range of models and through structured practice. We explore two sections based on the two examinations: Passages, and Writing. We take this in turn using the analytical skills of Passages to be applied	**Visual**: Looking at the structure of written language for different purposes- **Read/Write:** Exercises from Cambridge A Level student book- chapter 1-2 **Kinaesthetic**: speeches, presentations,	There is no coursework for English LANGUAGE REGULAR PAST PAPERS THROUGHOUT THE YEAR ANALYSIS OF DIFFERENT FORMS OF WRITING PRESENTATIONS

		to Writing.	group work, role play scenarios	
September	Unit 2: Commentary **Recommended prior knowledge** Understanding of how language works in a range of contexts with some ability to organise ideas and communicate textual analysis in written English.	**Context** This unit has as its subject matter the acquisition of skills for writing commentaries for set passages for Paper 1. It could be undertaken at any time during the AS Level course, but its focus on fundamental skills makes it well-suited to be one of the earlier, introductory units. **Outline** This unit tackles the identification, understanding and appreciation of specific features of language, form and style, and of how these features relate to purpose, audience and context in a range of text types.	**Visual**: Looking at the structure of written language for different purposes- **Read/Write:** Exercises from Cambridge A Level student book- chapter 3-4 **Kinaesthetic**: speeches, presentations, group work, role play scenarios	Mixed exercises with exam type questions. December: Mock exams (A´Level past papers)
October	Unit 3: Directed writing **Recommended prior knowledge** A competence of written English at O Level/IGCSE with some appreciation of how different forms of written English are required in different contexts.	**Context** This unit has as its subject matter the acquisition of skills for directed writing in response to the set passages for Paper 1. It could be undertaken at any time during the AS Level course, most helpfully in combination with Unit 2. **Outline** This unit deals with how to write for a specific purpose and/or audience, using appropriate vocabulary, tone, and	**Visual**: Looking at the structure of written language for different purposes- **Read/Write:** Exercises from Cambridge A Level student book- chapter 5-6	Mixed exercises (for each chapter) with exam type questions.

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		style.	**Kinaesthetic**: speeches, presentations, group work, role play scenarios	
November	Unit 4: Imaginative writing (narrative/descriptive) **Recommended prior knowledge** A competence of written English at O Level/IGCSE. Some appreciation of how different forms of written English are required in different contexts.	**Context** This unit has as its subject matter the acquisition of skills for Paper 2 Section A. It could be undertaken at any time during the AS Level course, most helpfully in combination with Unit 5. **Outline** This unit deals with narrative or descriptive writing, and concentrates on developing the ability of learners to write imaginatively, using language to create deliberate effects, e.g. in conveying a mood or describing a character.	**Visual**: Looking at the structure of written language for different purposes- **Read/Write:** Exercises from Cambridge A Level student book- chapter 7-8 **Kinaesthetic**: speeches, presentations, group work, role play scenarios	Presentations of how to answer exams questions, peer assessment, direct questioning
December	Unit 5: Writing for an audience (discursive/argumentative) **Recommended prior knowledge**	**Context** This unit has as its subject the acquisition of skills for Paper 2 Section B, and might be best studied towards the end of the AS Level course, as learners often find it the most challenging aspect.	**Visual**: Looking at the structure of written language for different purposes-	Assignments Language Analysis & Written work for purpose

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	A competence of written English, demonstrated through success at O Level/IGCSE. Some appreciation of how different forms of written English are required in different contexts.	**Outline** This unit addresses writing for an audience, with the outcome being a discursive or argumentative essay of 600–900 words, written in one hour under examination conditions. This may sometimes be in letter form.	**Read/Write:** Exercises from Cambridge A Level student book-chapter 9-10 **Kinaesthetic**: speeches, presentations, group work, role play scenarios	
January	Unit 6: Text analysis **Recommended prior knowledge** Experience of a wide range of text types at AS Level and proficient command of written English.	**Context** This unit builds on the reading and writing skills developed at AS Level. The potential range of material for reading and analysis is wider, and includes transcriptions of natural (spontaneous and semi-spontaneous) speech as well as prepared/scripted speech. In the directed writing task, skills of commentary are extended to cover comparison of the candidate's own style and language with the style and language of original texts. **Outline** An element of comparison is required in Paper 3 in the analysis of specific features of form and style, and of how these features relate to purpose, audience and context in a range of text types.	**Visual**: Looking at the structure of written language for different purposes- **Read/Write:** Exercises from Cambridge A Level student book-chapter 11-12 **Kinaesthetic**: speeches, presentations, group work, role play scenarios	Analysis of particular short story writing

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February	Unit 7: Language topics **Recommended prior knowledge** Learners should have an understanding of how language works in a range of contexts; proficient command of written English and an interest in linguistic issues.	**Context** This unit develops interdependent skills of reading, analysis and research, with an increased emphasis on spoken language. **Outline** Learners require a firm foundation for further study of language and linguistics. Learners are required to focus on two out of three Language Topics A, B and C: Spoken language and social groups; English as a global language; Language acquisition by children and teenagers.	**Visual**: Looking at the structure of written language for different purposes- **Read/Write:** Exercises from Cambridge A Level student book- chapter 13-End **Kinaesthetic**: speeches, presentations, group work, role play scenarios	Analysis of student responses
March	PAST PAPERS	READING Question 1 WRITING Q 1	**Visual**: Sample responses **Read/Write:** Past Papers **Kinaesthetic**: Peer Assessment in writing	Mixed exercises (for each chapter) with exam type questions. Feb/ March: Topic test on year 11 topics so far
April	PAST PAPERS	Reading Q2 & 3 Writing Q2	**Visual**: Sample responses **Read/Write:** Past Papers	

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			Kinaesthetic: Peer Assessment in writing	
May	PAST PAPERS	Writing Q3	**Visual**: Sample responses **Read/Write:** Past Papers **Kinaesthetic**: Peer Assessment in writing	Mixed exercise with exam type questions. April/ May: Exam style questions and past papers including some in exam conditions

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2025-26 Contents

Subject: English Literature	**Year 12**	**Teacher: Mrs Burrow**
No. of lessons per week: 5	**Date:** 2025-26	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
HT1 Sept - Oct	Paper One - Drama and Poetry We will study the anthology "And Still I Rise" by Maya Angelou Paper Two - Prose and the Unseen We will begin reading "The Underground Railroad" by Carlson Whitehead	KC 1 Language KC 2 - Form KC3 - Structure KC4 - Genre KC6 - Style Students will gain a sense of genre and develop a sense of poetic form and content. They will gain an understanding of poetic structure, in particular autobiographical experience, incorporating the use of technical language and academic register. Students will understand metre, rhyme and different forms of alliteration. Students will also understand neologisms and archaisms.	**Visual**: Reading of texts/ PowerPoint activities. Graphs. **Auditory**: Listening to the reading of texts by others. **Read/ Write**: Exercises from Cambridge Checkpoint and stages textbooks. **Kinaesthetic**: Building and presenting Power Points.	Individual research projects - investigating the poet Maya Angelou. Resesarch regarding slavery and its influences in America. Students will also take part in Socratic seminars to develop their critical thinking. Half termly mini assessments Response to AIS marking
HT2	Paper One Drama and Poetry	KC1 - Language KC3 - Form KC 4 - Genre	**Visual**: Flash Cards/ quiz games **Auditory**: Listening to	Individual research projects - investigating the playwright Tenessee Williams in terms of

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	We will complete the reading of "The Underground Railroad" We will begin reading the play "Who's Afraid of Virginia Woolf?"	KC6 - Style KC 7 - Interpretation Students will explore central characters, both major and minor. They will explore writers' use of characters from history and explore gender issues in drama. They will explore the use of allegorical/symbolic characters in drama. Students will study various forms of dialogue/monologue /soliloquy (developing their skills from HT1). We will explore interaction between characters and the revelation of character. Students will also explore key concepts. Students will explore dramatic structures including openings/expositions and the play as a process. Students will also explore climax/crisis/turning points/resolution/denouement/catastrophe	the questions of tasks and games online. **Read/ Write**: creative writing tasks. Worksheets and self assessment target setting. **Kinaesthetic**: Presenting ideas in discussions, challenging others with intellectual intentions.	influences and context. Students will also take part in Socratic seminars to develop their critical thinking. Half termly mini assessments Response to AIS marking
HT3 and HT4	Paper Two - Prose and Unseen texts Understanding the Narrative Voice	KC1 - Language KC4 - Genre KC6 - Style Students will understand the use of the first, second and third person in prose. They will understand the use of multiple narrators/perspectives in writing. They will explore openings and chronologies. We will explore description, dialogue, action and plot development. Also, settings, endings and the presentation of characters in prose. Students will explore the way writers create characters through dialogue and by using other characters. Students will explore the use of authorial intrusions and tone.	**Visual**: Newspaper articles, physical and online material. **Auditory**: Listening to the readings of nonfiction and fiction texts. Responding to set questions that aren't written on the board or typed already for students. **Read/ Write**: Discursive writing. Responding to tasks of auditory setting. Creative writing tasks.	Individual research projects - investigating a novelist to be selected Students will also take part in Socratic seminars to develop their critical thinking. Half termly mini assessments

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		Students will explore tone and the use of figurative language in prose. We will explore the use of syntax together with style and interpretation.	**Kinaesthetic**: Group work, designing class-room.	Response to AIS marking
HT5	Paper Two – Unseen We will study a range of texts and apply critical thinking.	KC2 – Form KC3 - Structure KC4 – Genre KC5 - Context KC7 - Interpretation We will explore the presentation of characters across a variety of texts. Students will also study the role of the protagonist. We will look at a critical introduction to form – drama, prose, short story, poetry. We will plan responses and study how to write a critical essay. Students will assess a writer's purpose and think about the conveyance of key messages. We will try to ascertain a writer's concerns. Students will also study openings and endings looking at concerns of narrative and reliability. We will discuss chronology and time	**Visual**: Newspaper articles, physical and online material. **Auditory**: Listening to the readings of nonfiction and fiction texts. Responding to set questions that aren't written on the board or typed already for students. **Read/ Write**: Discursive writing. Responding to tasks of auditory setting. Creative writing tasks. **Kinaesthetic**: Group work, designing class-room.	Individual research projects introducing a variety of texts across a range of genres. Building up the BIG revision in preparation for the AS examination.
HT6	Revision in preparation for AS examination	Depending on need, students will revise topics for the AS examination. We will look at sample responses provided by the exam board and be able to understand how marks have been awarded. Students will do mini-assessments based on each of the topics to ensure that they have an understanding of the key issues and the language, form and structure of the texts.		

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Subject: Global Perspectives and research 9239 Cambridge	Year group: 12	Teacher: M.Galiana
No. of lessons per week: 5	Date: **2025-26**	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
			Teaching & Learning Styles (VARK): **Visual**: **Auditory**: **Read/Write:** **Kinaesthetic**:	
September October	The critical path Global Issues Question cards A Learner's Guide to the Cambridge Research Report Research design The core stages of research design Reflecting upon your research design Introduction for components 2,3,4 The critical path Standard of living Quality of life	Introduction writing skills Collect information, ideas and arguments Question information, ideas and arguments Reflect on information, ideas, arguments and issues	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay An email to a government minister describing their findings and outlining what the government might do to limit the impact of global warming Group research

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	Migration and work Gender issues Post truth			
October November	AO1 AO2 AO3 Stage 1. Selecting your topic Component 2: essay Component 3: team project Sources Context Author Energy Political systems Globalization	Methodological skills comprise the attributes you will need to design and carry out a research project. Such skills include the ability to select the best methods to use to answer a question, the ability to devise a research question and the ability to make sense of your findings and write them up in a way that answers your question.	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Group research The project should show evidence that students have worked with students from another culture, community or country. Group production of a project plan.
November December	Stage 2. Developing your research question Component 2: essay Component 3: team project Component 4: Cambridge research report (outline proposal form) Introducing deconstruction: analysing and evaluating arguments and evidence Changing national identities Migration and work	Critical thinking skills include the ability to detect bias, evaluate different arguments and types of evidence together with the ability to reflect on your own learning and argue different perspectives.	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Exam Practice exam paper The focus of the Written Paper is enquiry, reasoning and evaluation. In response to a stimulus based on listed topics

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December January	Stage 3. The practical and personal considerations of research design Stage 4. Desk Research: identifying, searching and reviewing the literature Stage 5. Selecting your methods Deconstruction with reconstruction: organising sources and perspectives Cultural heritage Gender issues	• maintain and use a research log in support of the research process • select and analyse appropriate concepts, arguments, perspectives and evidence from a range of source material • analyse and use relevant and credible evidence in support of arguments and overall perspectives • analyse relevant perspectives, showing awareness of how the arguments, claims and the nature of the evidence are used to support Conclusions	Research on the internet Reading different information Presentations Posters Mind Mapping Debates Collect detailed digital photographs Put together an exhibition or poster showing the different perspectives of how the world's need for energy has to change together with written commentary	Exercise books Individual research
January February	Stage 6. Gathering Primary Data Stage 7. Analysing your data Deconstruction, reconstruction and reflection: planning the essay Communication: writing the essay Logic	• communicate clearly throughout the report using appropriate academic terms, referencing and citation techniques • provide an oral explanation and justification of your own report findings,	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Project research

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	Fallacies	choice and use of research methods and methodology.		
February March	Stage 8. Writing up your Cambridge Research Report Research ethics Plagiarism Submitting guide Digital life Hacking elections Algorithm bias Digital divide	• evaluate specific research methods and methodology • evaluate and synthesise evidence to draw reasoned conclusions • evaluate and synthesise alternative perspectives and interpretations in order to make your own reasoned personal judgments • reflect on the scope, nature and limitations of your own research report, and how and why your own personal viewpoints of the issue/s researched may have changed during the research process	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Project research
March April	Stage 8. Writing up your Cambridge Research Report Reviewing Assessment Tracking progress Analysis of examiner report Preparations for A Level exams	Design own questions for research Plan and design own essay and response to this issue Combining different sources of information using statistics and tables	Research on the internet Reading different information Presentations Posters Mind Mapping Debates Contact other schools and organizations	Exercise books Essay Project research Exam

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			Demonstrate understanding of this issue on a global scale Make recommendations	
April May	Preparations for A Level exams	Collect information, ideas and arguments Question information, ideas and arguments Reflect on information, ideas, arguments and issues	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Project research
June	Preparations for A Level exams	Same competencies during September-April Writing past papers under exam conditions	Past paper practice	Final exam

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AS Mathematics: (Edexcel 8MA0) See plans below for Pure, Statistics and Mechanics which are all compulsory units of Mathematics.

Subject: Mathematics-Pure Mathematics	**Year 12**	**Teacher: Mrs.K. Reed**
No. of lessons per week: 3 (Students also have 1 lesson of Mechanics and 1 of Statistics - see separate plans below)	**Date:**	2025-26

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
	Year 12 students will follow **Pure Mathematics 1** and **Statistics and Mechanics 1** (see separate documents) In Year 13, they will follow Pure Mathematics 2 and complete Statistics and Mechanics 2.		Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	
Autumn Term: September/ October	**Algebraic Expressions** **Quadratic Functions**	Revise and practise Higher level GCSE topics of Algebra; Rules of indices for all rational exponents, Multiplying out of brackets, factorising quadratics, Surds - simplifying and rationalising the denominator. Manipulate polynomials, including expanding brackets, collecting like terms, factorising. Solve quadratic equations using factorisation, quadratic formula and completing the square General form of quadratic function Plotting graphs and solving quadratics	**Visual**: Recognising different types of graphs and their characteristics, effect of the discriminant etc. Use of graphing software and completing related activities. **Auditory**: Watching, listening to (and adding to) one another's descriptions of how to describe discriminant and what information it provides -	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.

	Equations and Inequalities **Sketching and recognising graphs of functions**	Discriminants - what information do they give? - conditions for real and repeated roots. Sketching with relevant info- turning points Completing the square - what info does that give? Use and apply models that involve quadratic functions. Solving simultaneous equations by elimination and by substitution including one linear and one quadratic. Interpret algebraic solutions of equations graphically Solve linear and quadratic inequalities, interpret inequalities graphically. Express solutions using set notation - correct use of AND and OR. Sketch Cubic graphs, reciprocals and Quartic graphs Use Intersections of graphs to solve equations Transformations of graphs, f(x) notation.	group activity. Recommended videos - in and out of the classroom. **Read/Write:** Exercises from Pure 1 textbook chapters 1-4. Google classroom for homework and classroom activities, providing resources. **Kinaesthetic**: Use of mini whiteboards and quick show of graphs.Online graphing software and quizzes, matching activities, Use of calculators: entering negative and fractional powers and for checking solutions to quadratics	
Autumn Term November / December	**Straight line graphs**	Finding and using equations of straight lines and be able to use straight line models in a variety of contexts. Finding midpoints of lines Working with gradients - parallel and perpendicular. Finding equations of perpendicular bisectors Distance between points Finding points of intersection.	**Visual**: Graph work to find gradients. Use of Chromebooks - online question and answer activities. Whole class discussions and demonstrations.Recommended videos and activities to strengthen understanding.	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by

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	Circles **Algebraic Methods** **The Binomial Expansion**	Length and area problems. Circles - equation of a circle, geometric problems on a grid. Finding centre and radius, eqtn of tangent to a circle Problem solving with circles- do lines meet the circle etc. Problem solving with circles, lines and triangles. Cancel factors in algebraic fractions Divide a polynomial by a linear expression Use the factor theorem to factorise a cubic expression Construct Mathematical proofs using algebra Use proof by exhaustion and disproof by counterexample Use Pascal's triangle to identify binomial coefficients and use them to expand simple binomial expressions Use combinations and factorial notation Use the Binomial expansion to expand brackets	**Auditory:** Whole class and group discussions. **Read/Write:** Exercises from Pure 1 textbook chapters 5-8. Google classroom for homework and classroom activities, providing resources. **Kinaesthetic**: further understanding of what constitutes a proof.	the teacher to check layout and workings. Test on ch 1-4
Spring Term January/ February	**The Binomial Expansion (complete)** **Trigonometric Ratios**	Find individual coefficients and make approximations using the binomial expansion Use cosine rule to find a missing side or angle Use the sine rule to find a missing side or angle	**Visual**: Whiteboard demonstration of differentiation "in action". Use of Chromebooks - online question and answer activities. Whole class discussions and	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and

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	Trigonometric identities and Equations **Vectors in 2D**	Find the area of a triangle Problem solve with triangles Sketch the graphs of sine, cosine and tangent Sketch simple transformations Calculate sine, cos and tan of any angle and know exact ratios for key angles Know and use tanΘ= sinΘ/cosΘ and sin^2+ cos^2= 1 Solve trigonometric equations: sin Θ = k, sin nΘ= k, sin (Θ+*a*) = k Also for cos and tan Solve trig eqtns that produce quadratics Definitions,magnitude and direction, addition and scalar multiplication. Position vectors, vectors between two points, geometric problems. Use vectors to solve problems.	demonstrations. Videos to support the topic and strengthen understanding. **Auditory**: Constructive criticism of each other´s solutions, participation in whole class and group discussions and activities. **Read/Write:** Exercises from Pure 1 textbook chapters 8-11. Google classroom for homework and classroom activities, providing resources. Online quizzes and assessments for personal target setting. **Kinaesthetic**: Investigate the trig ratios - further understanding of what constitutes a proof.	homework are self-marked for answers and checked by the teacher to check layout and workings. **Mock exams - feedback and personalised target setting for the remainder of the AS year. Record of targets to be maintained by each student collaborating with the teacher.**
Spring term: March/ April	**Differentiation** **Integration**	Definition, differentiating polynomials, second derivatives. Finding the equations of tangent and normal Gradients, tangents, normals, maxima and minima. Differentiation from first principles. Sketch gradient functions.	**Visual**: Use of revision videos - both those recommended by the teacher and those found as a result of personal research by the student. **Auditory**: Collaborative work on answering exam questions -	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are

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	Exponentials and Logarithms **Then - Exam Past Paper practice - preparation for May exams.**	Definition as opposite of differentiation, indefinite integrals of x^n Definite integrals. Notation of f(x) and f´(x) Finding area bounded by a curve and the x-axis or straight lines Sketch graphs of the form $y = a^x$ and their transformations Differentiate e^{kx} Use and interpret models that use exponential functions Recognise the relationship between exponents and logarithms Recall and apply the laws of logarithms Solve equations of the form $a^x=b$ Describe and use the natural logarithm function Use logarithms to estimate values of constants in non linear models Past papers and revision materials provided - in class and for homework.	identifying where solutions have broken down, what needs to be included to gain maximum possible marks. **Read/Write:** Exercises from Pure 1 textbook chapters 12-14. Google classroom for homework and classroom activities, providing resources.Use of revision notes, examples and sample solutions. **Kinaesthetic**: Use of calculators for log(x) and ln(x). Using graphing software to assist in finding and checking solutions. Investigation to discover Euler's number and its real life applications. Continuation of work on puzzles and matching activities to assist where skills and knowledge are still not as strong as they should be.	self-marked for answers and checked by the teacher to check layout and workings. Test on chapters 12 & 13 Revision exercises, practice papers and mock exams set for Pure 1
Summer Term: June	**After exams start Year 13 <u>Pure 2</u> chapters 1-2** Algebraic Methods	Use proof by contradiction to prove true statements Multiply and divide 2 or more algebraic fractions Add or subtract 2 or more algebraic fractions Convert an expression with linear factors in the	**Visual**: Using graphing software to practise and revise properties of inverse functions - the effect on	Revision exercises and practice papers set for AS Mathematics.

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		denominator into partial fractions Convert an expression with repeated linear factors in the denominator into partial fractions Divide algebraic expressions (Algebraic- Long division) Convert an improper fraction into partial fraction form	domain and range. **Read/Write:** Exercises from Pure 2 textbook ch 1 & 2. Google classroom for homework and classroom activities, providing resources. **Kinaesthetic**: Function machines and physical mappings	Final external exams for Pure 1 are in late May/early June. Mixed exercise and exam type questions are done for each chapter for A Level. Tasks and revision are set over Summer.

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Subject: Mathematics- Statistics	**Year 12**	**Teacher: Mrs. Kate Reed**
No. of lessons per week: 1 (Students also have 3 Pure lessons and 1 Mechanics lesson)	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
	Year 12 Maths students will follow **Pure 1** and **Statistics and Mechanics** (see separate documents) In Year 13, they will follow Pure 2 and complete Statistics and Mechanics.		Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	
Autumn Term: September/ October	**Data Collection**	Understand and use the terms 'population' and 'sample'. Use samples to make informal inferences about the population. Students will be expected to comment on the advantages and disadvantages associated with a census and a sample. Understand and use sampling techniques, including simple random sampling and opportunity sampling. Students will be expected to be familiar with: simple random sampling, stratified sampling, systematic sampling, quota sampling and opportunity (or convenience) sampling. Select or critique sampling techniques in the context of solving a statistical problem, including	**Visual**: Mini Whiteboards to show inferences **Auditory**: Watching, listening to (and adding to) one another's descriptions of how to describe the different types of sampling **Read/Write:** Notes and exercises on sampling Google classroom- homework activities	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.

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	Measures of location and spread	understanding that different samples can lead to different conclusions about the population. Interpret measures of central tendency and variation, extending to standard deviation. Data may be discrete, continuous, grouped or ungrouped. Understanding and use of coding. Measures of central tendency: mean, median, mode. Measures of variation: variance, standard deviation, range and interpercentile ranges. Use of linear interpolation to calculate percentiles from grouped data is expected. Be able to calculate standard deviation, including from summary statistics.		
Autumn Term November / December	**Representations of data**	Interpret diagrams for single-variable data, including understanding that area in a histogram represents frequency. Students should be familiar with histograms, frequency polygons, box and whisker plots (including outliers) and cumulative frequency diagrams. Connect to probability distributions. Recognise and interpret possible outliers in data sets and statistical diagrams. Select or critique data presentation techniques in the context of a statistical problem. Students will be expected to draw simple inferences and give interpretations to measures of central tendency and variation Be able to clean data, including dealing with missing data, errors and outliers. For example, students may	**Visual**: Short video clips on variety of data presentations Studying different diagrams and interpreting as a class **Read/Write:** Notes and exercises on data presentation and interpretation Google classroom: homework activities **Kinaesthetic**: Use of calculators and graphing software	Mixed exercise with exam type questions is done for each chapter. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.

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	Correlation	be asked to identify possible outliers on a box plot or scatter diagram. Interpret scatter diagrams and regression lines for bivariate data, including recognition of scatter diagrams that include distinct sections of the population (calculations involving regression lines are excluded). Students should be familiar with the terms 'explanatory (independent)' and 'response (dependent)' variables. Use of interpolation and the dangers of extrapolation. Variables other than x and y may be used. Understand informal interpretation of correlation. Use of terms such as 'positive', 'negative', 'zero', 'strong' and 'weak' are expected. Understand that correlation does not imply causation. (No calculations or appreciation of values of correlation are required).		
Spring Term January/ February	**Probability** **Statistical Distributions**	Understand and use mutually exclusive and independent events when calculating probabilities. Venn diagrams or tree diagrams may be used but use of set notation to describe events is not required. A formal understanding of conditional probability is not expected. Link to discrete and continuous distributions. No formal knowledge of probability density functions is required but students should understand that the area under the curve represents probability in the case of a continuous distribution.	**Visual**:Studying correlation graphs and discussing possible data sets **Read/Write:**Notes and exercises on correlation, central tendency. Google classroom: homework activities **Auditory:** Constructive criticism of each other´s	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.

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			solutions, participation in whole class and group discussions and activities.	Revision exercises Test on Stats chapters so far
Spring term: March/ April	**Hypothesis testing**	Understand the language and concept of hypothesis testing Understand that a sample is used to make an inference about a population Find critical values of a binomial distribution using tables. Carry out a one tailed(and two tailed) test for the proportion of the binomial distribution and interpret the results	**Visual**: Use of data sets and graphs of these- matching **Auditory**:Collaborative work on answering exam questions - identifying where solutions have broken down, what needs to be included to gain maximum possible marks. **Read/Write:** Notes and exercises on standard deviation and outliers. Google classroom: homework activities **Kinaesthetic**: Use of calculators and graphing software	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.
Summer Term: May/ June	**Revision**	Past papers and revision materials provided - in class and for homework.	**Visual/ Kinesthetic**: Continuation of work on puzzles and matching activities to assist where skills and knowledge are	Revision exercises and practice papers set for Stats

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	Then (after exam) work on Pure for Year 13		still not as strong as they should be. **Auditory**: Quizzes for each other based on work carried out this year **Read/Write:**Past exam questions/ past papers	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.

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Subject: Mathematics- Mechanics	**Year 12**	**Teacher: Mrs. Kate Reed**
No. of lessons per week: 1 (Students also have 3 Pure lessons and 1 Statistics lesson)	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
	Year 12 Maths students will follow **Pure 1** and **Statistics and Mechanics** (see separate documents) In Year 13, they will follow Pure 2 and complete Statistics and Mechanics.		Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	
Autumn Term: September/ October	**Modelling in Mechanics**	Understand how the concept of a mathematical model applies to mechanics Understand and be able to apply some of the common assumptions used in mechanical models Know SI units for quantities and derived quantities used in mechanics Know the difference between scalar and vector quantities	**Visual**: Force diagrams, calculator tutorial videos **Auditory**: Watching, listening to (and adding to) one another's descriptions of how to describe the different types of force **Read/Write:**Exercises from Stats & Mechanics book ch8 **Kinaesthetic**: Check	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings. Test on modelling

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			answers with vectors in calculator	
Autumn Term November / December	**Constant acceleration**	Understand and interpret displacement-time graphs Understand and interpret velocity-time graphs Derive the constant acceleration formulae and use them to solve problems Use the constant acceleration formulae to solve problems involving vertical motion under gravity	**Visual**: Short video clips on calculator usage Studying different diagrams and interpreting as a class **Read/Write:** Exercises from Stats & Mechanics book ch9 **Kinaesthetic**: Use of calculators and graphing software	Mixed exercise with exam type questions is done for each chapter and marked by teacher.
Spring Term January/ February	**Forces and Motion**	Draw force diagrams and calculate resultant forces Understand and use Newton's first law Calculate resultant forces by adding vectors Understand and use Newton's second law, F=ma Apply Newton's second law to vector forces and acceleration Understand and use Newton's third law Solve problems involving connected particles	**Visual**: Studying triangles to illustrate vector components **Read/Write:**Exercises from Stats and Mechanics book ch10 **Auditory:** Constructive criticism of each other´s solutions, participation in whole class and group discussions and activities.	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings. Revision exercises

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				Test on Mechanics chapters so far
Spring term: March/ April	**Variable acceleration**	Understand that displacement, velocity and acceleration may be given as functions of time Use differentiation to solve kinematics problems Use calculus to solve problems involving maxima and minima Use Integration to solve kinematics problems Use Calculus to derive constant acceleration formulae	**Visual**: Velocity/ time graphs- identify features **Auditory**: Collaborative work on answering exam questions - identifying where solutions have broken down, what needs to be included to gain maximum possible marks. **Read/Write:** Exercises from Stats and Mechanics book ch11 **Kinaesthetic**: Use of calculators and graphing software	For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.
Summer Term: May/ June	**Revision** **Then (after exam) work on Year 13 Pure topics**	Past papers and revision materials provided - in class and for homework.	**Visual/ Kinesthetic**: Use of physical models **Auditory**: Quizzes for each other based on work carried out this year **Read/Write:**Exam practice questions	Revision exercises and practice papers set for Mechanics For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.

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			Kinaesthetic: Students set up different areas of room for different topics for revision	All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.

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Subject: Biology	Year group: 12	Teacher: Jose Garciolo
No. of lessons per week: 5	Date: 2025-26	
Pearson Edexcel International Advanced Subsidiary and Advanced Level Biology (2018)	Specification link – click here	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
Sept- Oct	Topic 1 – Molecules, Transport and Health	1.1 understand the importance of water as a solvent in transport, including its dipole nature 1.2 (i) know the difference between monosaccharides, disaccharides and polysaccharides, including glycogen and starch (amylose and amylopectin) (ii) be able to relate the structures of monosaccharides, disaccharides and polysaccharides to their roles in providing and storing energy β-glucose and cellulose are not required in this topic. 1.4 know how monosaccharides (glucose, fructose and galactose) join together to form disaccharides (maltose, sucrose and lactose) and polysaccharides (glycogen,	Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic** 1.3 CORE PRACTICAL 1 Use a semi-quantitative method with Benedict's reagent to estimate the concentrations of reducing sugars	Practical skills: In order to develop their practical skills, students should be encouraged to carry out a range of core practical experiments related to this topic. There are also opportunities to carry out additional practical work, such as investigating the structure of a mammalian heart. Mathematical skills:

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		amylose and amylopectin) through condensation reactions forming glycosidic bonds, and how these can be split through hydrolysis reactions 1.5 (i) know how a triglyceride is synthesised by the formation of ester bonds during condensation reactions between glycerol and three fatty acids (ii) know the differences between saturated and unsaturated lipids 1.6 understand why many animals have a heart and circulation (mass transport to overcome the limitations of diffusion in meeting the requirements of organisms) 1.7 understand how the structures of blood vessels (capillaries, arteries and veins) relate to their functions 1.8 know the cardiac cycle (atrial systole, ventricular systole and cardiac diastole) and relate the structure and operation of the mammalian heart, including the major blood vessels, to its function Details of myogenic stimulation are not needed at IAS 1.9 (i) understand the role of haemoglobin in the transport of oxygen and carbon dioxide (ii) understand the oxygen dissociation curve of haemoglobin, the Bohr effect and the significance of the oxygen affinity of fetal haemoglobin compared with adult haemoglobin 1.10 understand the course of events that leads to atherosclerosis (endothelial dysfunction, inflammatory response, plaque formation, raised blood pressure)	and with iodine solution to estimate the concentrations of starch, using colour standards. 1.14 CORE PRACTICAL 2 Investigate the vitamin C content of food and drink.	There are opportunities for the development of mathematical skills in this unit, including tabulation and graphical treatment of data, concentrations and using appropriate units for physical quantities, calculation of percentage changes, and finding the initial rate of enzyme-catalysed reactions. (Please see Appendix 6: Mathematical skills and exemplifications for further information.)

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		1.11 understand the blood clotting process (thromboplastin release, conversion of prothrombin to thrombin and fibrinogen to fibrin) and its role in cardiovascular disease (CVD) 1.12 know how factors such as genetics, diet, age, gender, high blood pressure, smoking and inactivity increase the risk of cardiovascular disease (CVD) 1.13 understand the link between dietary antioxidants and the risk of cardiovascular disease (CVD) 1.15 be able to analyse and interpret quantitative data on illness and mortality rates to determine health risks, including distinguishing between correlation and causation and recognising conflicting evidence 1.16 be able to evaluate the design of studies used to determine health risk factors, including sample selection and sample size used to collect data that is both valid and reliable 1.17 understand why people's perception of risks are often different from the actual risks, including underestimating and overestimating the risks due to diet and other lifestyle factors in the development of heart disease 1.18 (i) be able to analyse data on the possible significance for health of blood cholesterol levels and levels of high-density lipoproteins (HDLs) and low-density lipoproteins (LDLs)		

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		(ii) know the evidence for a causal relationship between blood cholesterol levels (total cholesterol and LDL cholesterol) and cardiovascular disease (CVD) 1.19 understand how people use scientific knowledge about the effect of diet, including obesity indicators, such as body mass index and waist-to-hip ratio, exercise and smoking to reduce their risk of coronary heart disease 1.20 know the benefits and risks of treatments for cardiovascular disease		

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Nov - Dec	Topic 2 – Membranes, Proteins, DNA and Gene Expression	2.1 (i) know the properties of gas exchange surfaces in living organisms (large surface area to volume ratio, thickness of surface and difference in concentration) (ii) understand how the rate of diffusion is dependent on these properties and can be calculated using Fick's Law of Diffusion (iii) understand how the structure of the mammalian lung is adapted for rapid gaseous exchange 2.2 (i) know the structure and properties of cell membranes (ii) understand how models such as the fluid mosaic model of membrane structure are interpretations of data used to develop scientific explanations of the structure and properties of cell membranes 2.4 understand what is meant by osmosis in terms of the movement of free water molecules through a partially permeable membrane, down a water potential gradient 2.5 (i) understand what is meant by passive transport (diffusion, facilitated diffusion), active transport (including the role of ATP as an immediate source of energy), endocytosis and exocytosis (ii) understand the involvement of carrier and channel proteins in membrane Transport	2.3 CORE PRACTICAL 3 Investigate membrane properties including the effect of alcohol and temperature on membrane permeability. RECOMMENDED ADDITIONAL PRACTICAL Investigate tissue water potentials using plant tissue and graded concentrations of a solute. RECOMMENDED ADDITIONAL PRACTICAL Use a semi-quantitative method to estimate protein concentration using biuret	

		2.6 (i) know the basic structure of an amino acid Structures of specific amino acids are not required. (ii) understand the formation of polypeptides and proteins (amino acid monomers linked by condensation reactions to form peptide bonds) (iii) understand the significance of a protein's primary structure in determining its secondary structure, three-dimensional structure and properties (globular and fibrous proteins and the types of bonds involved in its three-dimensional structure) (iv) know the molecular structure of a globular protein and a fibrous protein and understand how their structures relate to their functions (including haemoglobin and collagen) 2.7 (i) understand the mechanism of action and the specificity of enzymes in terms of their three-dimensional structure (ii) understand that enzymes are biological catalysts that reduce activation energy (iii) know that there are intracellular enzymes catalysing reactions inside cells and extracellular enzymes catalysing reactions outside cells 2.9 (i) know the basic structure of mononucleotides (deoxyribose or ribose linked to a phosphate and a base, including thymine, uracil, adenine, cytosine or guanine) and the structures of DNA and RNA (polynucleotides composed of	reagent and colour standards. 2.8 CORE PRACTICAL 4 Investigate the effect of temperature, pH, enzyme concentration and substrate concentration on the initial rate of enzyme-catalysed reactions.	

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		mononucleotides linked by condensation reactions to form phosphodiester bonds) (ii) know how complementary base pairing and the hydrogen bonding between two complementary strands are involved in the formation of the DNA double helix 2.10 (i) understand the process of DNA replication, including the role of DNA polymerase (ii) understand how Meselson and Stahl's classic experiment provided new data that supported the accepted theory of replication of DNA and refuted competing theories 2.11 understand the nature of the genetic code (triplet code, non-overlapping and degenerate) 2.12 know that a gene is a sequence of bases on a DNA molecule that codes for a sequence of amino acids in a polypeptide chain 2.13 (i) understand the process of protein synthesis (transcription and translation), including the role of RNA polymerase, translation, messenger RNA, transfer RNA, ribosomes and the role of start and stop codons (ii) understand the roles of the DNA template (antisense) strand in transcription, codons on messenger RNA and anticodons on transfer RNA		

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		2.14 (i) understand how errors in DNA replication can give rise to mutations (substitution, insertion and deletion of bases) (ii) know that some mutations will give rise to cancer or genetic disorders, but that many mutations will have no observable effect 2.15 (i) understand what is meant by the terms gene, allele, genotype, phenotype, recessive, dominant, codominance, homozygote and heterozygote (ii) understand patterns of inheritance, including the interpretation of genetic pedigree diagrams, in the context of monohybrid inheritance (iii) understand sex linkage on the X chromosome, including red-green colour blindness in humans 2.16 understand how the expression of a gene mutation in people with cystic fibrosis impairs the functioning of the gaseous exchange, digestive and reproductive systems 2.17 (i) understand the uses of genetic screening, including the identification of carriers, pre-implantation genetic diagnosis (PGD) and prenatal testing, including amniocentesis and chorionic villus sampling (ii) understand the implications of prenatal genetic screening 2.18 be able to identify and discuss the ethical and social issues relating to genetic		

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		screening from a range of ethical viewpoints, including religious, moral and social implications		
Jan - Feb	Topic 3 – Cell Structure, Reproduction and Development	3.1 know that all living organisms are made of cells, sharing some common features 3.2 understand how the cells of multicellular organisms are organised into tissues, tissues into organs, and organs into organ systems 3.3 (i) know the ultrastructure of eukaryotic cells, including nucleus, nucleolus, ribosomes, rough and smooth endoplasmic reticulum, mitochondria, centrioles, lysosomes and Golgi apparatus (ii) understand the function of the organelles listed in (i) 3.4 understand the role of the rough endoplasmic reticulum (rER) and the Golgi apparatus in protein transport within cells, including their role in the formation of extracellular enzymes 3.5 (i) know the ultrastructure of prokaryotic cells, including cell wall, capsule, plasmid, flagellum, pili, ribosomes and circular DNA (ii) understand the function of the structures listed in (i) 3.6 be able to recognise the organelles in 3.3 from electron microscope (EM) images 3.7 (i) know how magnification and resolution can be achieved using light and electron microscopy (ii) understand the importance of staining specimens in microscopy 3.9 (i) know that a locus is the location of genes on a chromosome (ii) understand the linkage of genes on a chromosome	3.8 CORE PRACTICAL 5 (i) use a light microscope to make observations and labelled drawings of suitable animal cells (ii) use a graticule with a microscope to make measurements and understand the concept of scale RECOMMENDED ADDITIONAL PRACTICAL Investigate factors affecting the growth of pollen tubes. 3.15 CORE PRACTICAL 6 Prepare and stain a root tip squash	Practical skills: In order to develop their practical skills, students should be encouraged to carry out a range of core practical experiments related to this topic. There are also opportunities to carry out additional practical work, such as investigating factors affecting the growth of pollen tubes. Mathematical skills: There are opportunities for the development of mathematical skills in this unit, including using ratios, percentages and fractions, substituting values into algebraic equations, calculation of

		3.10 understand the role of meiosis in ensuring genetic variation through the production of non-identical gametes as a consequence of independent assortment of chromosomes in metaphase I and crossing over of alleles between chromatids in prophase I Names of the stages of prophase are not required. 3.11 understand how mammalian gametes are specialised for their functions (including the acrosome in sperm and the zona pellucida in the egg cell) 3.12 know the process of fertilisation in mammals, including the acrosome reaction, the cortical reaction and the fusion of nuclei 3.13 know the process of fertilisation in flowering plants, starting with the growth of a pollen tube and ending with the fusion of nuclei 3.14 understand the role of mitosis and the cell cycle in producing genetically identical daughter cells for growth and asexual reproduction 3.16 be able to calculate mitotic indices 3.17 (i) understand what is meant by the terms stem cell, pluripotent and totipotent, morula and blastocyst (ii) be able to discuss the ways in which society uses scientific knowledge to make decisions about the use of stem cells in medical therapies 3.18 understand how cells become specialised through differential gene expression, producing active mRNA, leading to the synthesis of proteins which, in turn, control cell processes or determine cell structure in animals and plants	to observe the stages of mitosis.	magnification, understanding the terms mean, mode and median, constructing and interpreting frequency tables, bar charts and histograms. (Please see Appendix 6: Mathematical skills and exemplifications for further information.)

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		3.19 understand how one gene can give rise to more than one protein through post-transcriptional changes to messenger RNA (mRNA) 3.20 (i) understand how phenotype is the result of an interaction between genotype and the environment (ii) know how epigenetic modification, including DNA methylation and histone modification, can alter the activation of certain genes (iii) understand how epigenetic modifications can be passed on following cell division 3.21 understand how some phenotypes are affected by multiple alleles for the same gene, or by polygenic inheritance, as well as the environment, and how polygenic inheritance can give rise to phenotypes that show continuous variation		
Mar - May	Topic 4 - Plant Structure and Function, Biodiversity and Conservation	4.1 (i) know the structure and ultrastructure of plant cells including cell wall, chloroplast, amyloplast, vacuole, tonoplast, plasmodesmata, pits and middle lamella and be able to compare it with animal cells (ii) understand the function of the structures listed in (i) 4.2 be able to recognise the organelles in 4.1 from electron microscope (EM) images 4.3 understand the structure and function of the polysaccharides starch and cellulose, including the role of hydrogen bonds between the β-glucose molecules in the formation of cellulose microfibrils 4.4 understand how the arrangement of cellulose microfibrils and secondary thickening	4.6 CORE PRACTICAL 7 Use a light microscope to: (i) make observations, draw and label plan diagrams of transverse sections of roots, stems and leaves (ii) make observations, draw	

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		in plant cell walls contributes to the physical properties of xylem vessels and sclerenchyma fibres in plant fibres that can be exploited by humans 4.5 know the similarities and differences between the structures of, the position in the stem, and the function of sclerenchyma fibres (support), xylem vessels (support and transport of water and mineral ions) and phloem (translocation of organic solutes) 4.7 understand how the uses of plant fibres and starch may contribute to sustainability, including plant-based products to replace oil-based plastics 4.8 understand the importance of water and inorganic ions (nitrate, calcium ions and magnesium ions) to plants 4.10 understand the conditions required for bacterial growth 4.11 know that substances derived from plants can have antimicrobial and other therapeutic properties 4.13 understand the development of drug testing from historic to contemporary protocols, including William Withering's digitalis soup, double blind trials, placebo and three-phased testing 4.14 (i) understand that classification is a means of organising the variety of life based on relationships between organisms using differences and similarities in phenotypes and in genotypes, and is built around the species concept	and label cells of plant tissues (iii)identify sclerenchyma fibres, phloem, sieve tubes and xylem vessels and their location. RECOMMENDED ADDITIONAL PRACTICAL Investigate plant mineral deficiencies. 4.9 CORE PRACTICAL 8 Determine the tensile strength of plant fibres. 4.12 CORE PRACTICAL 9 Investigate the antimicrobial properties of plants, including aseptic techniques for the safe handling of bacteria.	

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		(ii) understand the process and importance of critical evaluation of new data by the scientific community leading to new taxonomic groupings, based on molecular evidence, including the three-domain system (Archaea, Bacteria and Eukarya) 4.15 know that, over time, the variety of life has become extensive but is now being threatened by human activity 4.16 understand what is meant by the terms biodiversity and endemism 4.17 know how biodiversity can be measured within a habitat using species richness, and within a species using genetic diversity by calculating the heterozygosity index: number of heterozygotes heterozygosity index = number of individuals in the population 4.18 understand how biodiversity can be compared in different habitats using the formula to calculate an index of diversity (D): 4.19 understand the concept of niche and be able to discuss examples of adaptations of organisms to their environment (behavioural, anatomical and physiological) 4.20 (i) understand how the Hardy-Weinberg equation can be used to see whether a change in allele frequency is occurring in a population over time (ii) understand that changes in allele frequency can come about as a result of mutation and natural selection (iii) understand that reproductive isolation can lead to accumulation of different		

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		genetic information in populations, potentially leading to the formation of new species 4.21 be able to evaluate the methods used by zoos and seed banks in the conservation of endangered species and their genetic diversity, including scientific research, captive breeding programmes, reintroduction programmes and education		

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Subject: Chemistry AS CHEMISTRY SYLLABUS	**Year 12**	**Teacher C Thomas**
No. of lessons per week: 5		

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
			Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	
September	Physical (P) – Atoms, molecules and stoichiometry	Students will learn to define and use the terms relative atomic, isotopic, molecular and formula masses and explain the significance of the mole and the Avogadro constant. Pupils will also learn to calculate the relative atomic mass of an element given the relative abundances of its isotopes, or its mass spectrum.	Visual/Auditory: Pupils must take notes from verbal and written instructions regarding calculations. Practical work and exercises Read/write: Write and construct balanced equations and perform calculations using these. Practical work and exercises Kinaesthetic: Using molymods to build complex molecules and show isomers.	Physical Unit Assessment Weekly homework for each topic Feedback from class activities

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			Analysing mass spectra in terms of isotopic abundances.	
	(P) Atomic Structure	Pupils will re-cap what they already know about the distribution of charge within atoms and deepen their knowledge by learning about how electrons are organised into shells and how this impacts upon atomic properties.	Visual/write: Students should be able to identify different orbital shells based on their appearance and replicate these by sketching them Auditory: Pupils will be asked to teach each other about various electron orbitals. Practical work and exercises	Physical Unit Assessment Weekly homework for each topic Feedback from class activities
	(P) Chemical Bonding	Pupils will investigate the differences between ionic, covalent, metallic and intermolecular bonding and forces.	Visual: Pupils should be able to use dot-cross diagrams to show how covalent bonding works. Auditory: Pupils will be able to present about the differences between types of bonding and take notes on others´ work. Read/write: Pupils will be able to describe and explain the differences between types of bonds and predict how bonding impacts upon chemical properties. Practical work and exercises	Physical Unit Assessment Weekly homework for each topic Feedback from class activities
	(P) States of Matter	Pupils should be able to describe, in detail, the differences between the various states of matter.	Visual: Pupils should be able to use diagrams to show how gases behave at different pressures/temperatures. Read/write: Describe in detail the process and impact of hydrogen bonding.	Physical Unit Assessment Weekly homework for each topic Feedback from class activities

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		They must use relevant calculations and models to evidence their understanding, such as the general gas equation pV = nRT.	Kinaesthetic: Use molymods to show how large molecules such as fullerene are formed. Practical work and exercises	
	(P) Chemical Energies	Pupils will learn about enthalpy change ($\Delta H = -mc\Delta T$) during reactions and how this relates to bonding. They will also learn to use Hess´ Law to construct simple energy cycles. Pupils will also be introduced to entropy and must use Gibb´s free law to explain how enthalpy and entropy determine whether a reaction will be spontaneous or not.	Visual: Pupils will use online models to demonstrate the concepts of enthalpy and how it affect reactions. Read/write: Pupils will learn to use formulas to calculate enthalpy Practical work and exercises	Physical Unit Assessment Weekly homework for each topic Feedback from class activities
	(P) Equilibria	Students will be introduced to the Le Chatelier principle of equilibrium. They must use equilibrium constants to determine the reversibility of reactions.	Visual: Pupils will be given visual demonstrations of reversible reactions which involve colour change in order to demonstrate this phenomenon. Auditory: Pupils will be required to listen to videos and audio resources explaining Le Chatelier's principle. Read/write: Pupils will be able to describe and explain Le Chatelier's principle. Kinaesthetic: Pupils will conduct experiments using solutions in equilibria and will calculate the volume of chemical required to reverse the reactions given.	Physical Unit Assessment Weekly homework for each topic Feedback from class activities

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	(P) Reaction Kinetics	Pupils will develop their knowledge relating to rate of reaction and the factors that affect it. There will be a focus on using graphs and equations to determine the rate of reaction as this is a commonly asked question in examinations. Pupils will also describe the use of catalysts in terms of their effect on the rate of reaction and give detailed examples of processes which use catalysts.	Visual: Pupils will be shown diagrams and videos demonstrating the use of catalysts in industrial reactions. Auditory: Pupils will present their previous knowledge on rate of reactions to the class and must listen to test their own knowledge. Read/write: Pupils must learn to produce rate of reaction graphs and be able to determine the rate and rate half-life from these graphs. Kinaesthetic: Pupils will conduct rate of reaction experiments in order to later determine the rate using graphs. Practical work and exercises	Physical Unit Assessment Weekly homework for each topic Feedback from class activities
	Inorganic (I) The Periodic Table	Pupils will investigate the trends in the periodic table in terms of factors such as atomic radius, melting point, reactivity and explain these trends. Pupils will also be taught to predict the properties of an elements based upon its group in the table.	Visual: Pupils will familiarise themselves with the periodic table, particularly period 3, as this will make their work easier. Auditory: Pupils will discuss differences in the periodic table and identify trends. Read/write: Pupils will be asked to read information relating to an element and predict which group it belongs to based upon this.	Inorganic Unit Assessment Weekly homework for each topic Feedback from class activities

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	(I) Group 2	Pupils will investigate Group 2 of the periodic table and the compounds which are formed with the elements belonging to this group. Pupils will also explain the use of calcium hydroxide and calcium carbonate in agriculture.	Visual: Pupils will familiarise themselves with group 2 of the periodic table. Read/write: Pupils will be able to describe in detail the use of calcium compounds in agriculture. Practical work and exercises	Inorganic Unit Assessment Weekly homework for each topic Feedback from class activities
	(I) Group 17	Pupils will investigate the chemistry of the Group 17 elements and their compounds and and comment on their key properties. They will also investigate real-world uses of the halogens.	Visual: Pupils will compare the colours and key properties of the halogens by working with them in the laboratory. Auditory: Pupils will each report on one use of the halogens to the rest of the class. Read/write: Pupils will submit a report given to them for homework comparing the elements of groups 2 and 17. Practical work and exercises	Inorganic Unit Assessment Weekly homework for each topic Feedback from class activities
	(I) Nitrogen and Sulphur	Pupils will learn about 2 of the key elements in natural chemistry, nitrogen and sulphur and their roles in the environment. Pupils will focus particularly on the production and use of ammonia and nitrate and the production and impact of sulphur dioxide.	Visual: Pupils will be introduced to diagrams of the nitrogen cycle and shown how it's natural role in plant growth makes it a key component of modern fertilisers. Read/write: Pupils will use online resources to determine the impact sulphur dioxide has upon the environment, particularly through acid rain.	Inorganic Unit Assessment Weekly homework for each topic Feedback from class activities

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	Organic (O) Introduction to organic	Pupils will interpret and use the general, structural, displayed and skeletal formulae of a wide variety of organic compounds and use appropriate nomenclature for these substances. Pupils must also begin using the appropriate terms for the following: (i) functional group (ii) homolytic and heterolytic fission (iii) free radical, initiation, propagation, termination (iv) nucleophile, electrophile (v) addition, substitution, elimination, hydrolysis, condensation (vi) oxidation and reduction. Pupils will also investigate the shape of these molecules, the isomers that exist, and be introduced to stereoisomerism and chirality.	Visual: Pupils should be able to interpret and draw diagrams showing stereoisomers of various organic compounds. Read/write: Pupils must focus on developing their chemical vocabulary and particularly upon the correct nomenclature of isomers. Kinaesthetic: Pupils will use molymods to help better visualise stereoisomers. Practical work and exercises	Organic Unit Assessment Weekly homework for each topic Feedback from class activities
	(O) Hydrocarbons	Pupils must describe the properties of key hydrocarbon compounds such as alkanes, alkenes and arenes. In particular, pupils must familiarise themselves with arenes as they have not studied these before, and will learn to use terms such as electrophilic substitution.	Visual: Pupils will draw diagrams showing the difference between key hydrocarbon compounds. Read/write: Pupils must be able to describe terms such as electrophile, nucleophile and substitution and give examples relating to each. Kinaesthetic: Pupils will use molymods to reinforce the structural differences between the organic compounds.	Organic Unit Assessment Weekly homework for each topic Feedback from class activities

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	(O) Halogen Derivatives	Pupils will refresh their knowledge regarding halogenoalkanes and halogenoarenes and their properties. They will also demonstrate how their chemical properties make them both useful in industry and harmful to the environment.	Visual/Auditory: Pupils will watch a video showing the impact of CFCs on the ozone layer and how industries are now searching for alternatives to CFCs. Read/write: Pupils will describe the properties of halogenoalkanes and halogenoarenes and explain why these properties are desirable for some industrial purposes. Practical work and exercises	Organic Unit Assessment Weekly homework for each topic Feedback from class activities
	(O) Hydroxy Compounds	Pupils investigate the chemical properties of alcohols and phenol and how these compounds react with other chemicals.	Read/write: Pupils must be able to describe the key properties and uses of alcohols and phenol. Kinaesthetic: Pupils will investigate how alcohol and phenol can be used to produce other useful chemicals in industry through procedure based investigation. Practical work and exercises	Organic Unit Assessment Weekly homework for each topic Feedback from class activities
	(O) Carbonyl Compounds	Pupils will focus on the production of aldehydes and ketones and how they can be detected through various chemical tests.	Read/write: Pupils will research the mechanism of nucleophilic addition and how carbonyl compounds react with hydrogen cyanide through this process. Kinaesthetic: Pupils will carry out laboratory tests to determine the presence of ketones and aldehydes in various solutions.	Organic Unit Assessment Weekly homework for each topic Feedback from class activities

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	(O) Carboxylic Acids and derivatives	Pupils will research the chemistry of carboxylic acids, acyl chlorides and esters and describe the key processes of oxidation and hydrolysis in relation to these compounds.	Visual/read/write: Pupils must be able to sketch diagrams showing the structure of these substances and explain how they change upon reaction with other chemicals. Practical work and exercises	Organic Unit Assessment Weekly homework for each topic Feedback from class activities
	(O) Analytical Techniques	Pupils will learn to use essential analytical techniques such as chromatography, spectrometry and spectroscopy to identify key chemical properties of substances, such as structures/functional groups present and molecular mass.	Visual/Auditory/ Read/write/ Kinaesthetic: There is an emphasis on RK as pupils are required to use these skills in examination. Pupils will practice carrying out experimental procedures using written or verbal instructions and by following demonstrations. Practical work and exercises	Organic Unit Assessment Weekly homework for each topic Feedback from class activities Marked experimental tasks
May/ June	Examinations			

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Physics: See plan below for Physics (Edexcel IAL Physics 2018 - YPH11)

Subject: Physics	**Year 12**	**Teacher: Jose Antonio Garciolo Garcia**
No. of lessons per week: 5	**Date:** 2025-26	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc**
September/ October/ November	**Topic 1: forces and Motion** • Rectilinear motion • Momentum • Forces • Work, energy and power	Practical skills through experiments, measurements, rearranging mathematical formula, creating graphs Understanding key physics concepts : Conservation of momentum and energy, application of Newton's laws to systems of dynamic forces. Relationship between work and energy	**Visual**: Reading scales of different instruments **Auditory**: Listening theoretical explanation **Read/Write**: Reading exercises and describing experiments **Kinaesthetic**: Carrying out experiments in class.	Exercises from workbook chapters 1 Homework and exercises in class marked by students and checked by the teacher. Experimental skills in class Worksheet.

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December/ January	**Topic 2 : Materials** • Fluids • Solid materials	Practical skills through experiments Understanding key physics concepts : Density of fluids and effect of viscosity. Understanding Stokes law, The properties of solids and the impact Elastic and plastic deformation Calculating Young's modulus using stress and strain	**Visual**: Reading scales of different instruments **Auditory**: Listening theoretical explanation **Read/Write**: Reading exercises and describing experiments **Kinaesthetic**:Carrying out experiments in class	Exercises from workbook chapter 2 Homework and exercises in class marked by students and checked by the teacher. Experimental skills in class Unit 1 exam revision papers
February / March	**Topic 3 : Electric circuits** • Charge and current • Potential difference, emf and power • Resistivity and resistance • Internal resistance, series and parallel circuits and potential dividers	Experiments with circuits, measurements, handling of errors Understanding key physics concepts : Understanding current as the flow of charge Comparing electric potential and gravitational potential Applying Ohm's law and Kirchhoff's laws to analyse electric circuits with different types of electrical component	**Visual**: Reading scales of different instruments **Auditory**: Listening theoretical explanation **Read/Write**: Reading exercises and describing experiments **Kinaesthetic**:Carrying out experiments in class,	Exercises from workbook chapter 3 Homework and exercises in class marked by students and checked by the teacher. Experimental skills in class Worksheets.

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April	**Topic 4 : Waves and particle behaviour of lights** . • Nature of waves • Transmission and reflection of waves • Superposition of waves • Particle nature of light	Experiments with waves and light Understanding key physics concepts : Describe waves and the elements involved Explain diffraction and reflections of waves Explain superposition of waves Compare properties waves and how light behaves and then contrast with particle nature of light	**Visual**: Reading scales of different instruments **Auditory**: Listening theoretical explanation **Read/Write**: Reading exercises and describing experiments **Kinaesthetic**:Carrying out experiments in class,	Exercises from workbook chapter 4 Homework and exercises in class marked by students and checked by the teacher. Experimental skills in class Worksheet. Unit 2 exam revision and past papers
May /June	**Exam and revisions** **Units 1-3**	Revision all units and covering Unit 3 on practicals. Covering concepts such as measurement, error and precision		Unit 1-3 exam revision and past papers

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Subject: **Business Studies**	**Year 12**	**Teacher:** **Miguel Angel Vera Ortega**
No. of lessons per week: **5**	**Date:** 2025-26 International Edexcel Syllabus: XBS11	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
		These are the curriculum concepts that will be covered. The skills that are taught in Year 12 are application, analysis and evaluation. There will also be a clear focus on essay writing.	Teaching & Learning Styles (VARK): **Visual, Auditory**, **Read / Write, Kinaesthetic**	This is assessed with 2 papers which consist of short answers, an essay question and data response. Students will be assessed all in these ways to be ready for their exams.
sept	Meeting customer needs The market Market research Market positioning	Mass markets & niche markets Dynamic markets Competition Risk & uncertainty Primary and secondary market research Sampling Product and market orientation Market mapping Product or service Differentiation Adding value	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer

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oct	The Market Marketing objectives & strategies Marketing mix	Change in demand Change in supply Demand and supply interaction Price elasticity of demand Income elasticity of demand Objectives Product life cycle Boston matrix Product portfolio Marketing mix B2B B2C Consumer behaviour	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer
nov	Marketing Mix Managing people	product/service design Promotion and branding Pricing strategies Distribution Approaches to staffing Recruitment & selection Training Organisational structure Motivational theorists	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer
dec	Managing people	Financial methods of motivation Non financial methods of motivation Leadership Role of an entrepreneur Entrepreneurial motives and characteristics Objectives for an entrepreneur Opportunity cost Social objectives	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer

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jan	Planning a business and raising finance	Business plan Sources of finance. Internal and external Types of business, sole trader, partnership, private limited company, public limited company, franchise, social enterprise Liability Sales revenue and costs Break even	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer
feb	Finance Resource management	Cashflow Budgets Profit Liquidity Business failure Types of production. Job, batch, flow, cell Productivity Efficiency Labour or capital intensive Capacity utilisation Inventory control	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer
march	Resource management External influences	Quality, assurance, control, circles TQM Kaizen Inflation Exchange rates Interest rates Taxation Business cycle Legislation Competitive environment	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer

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april	revision	Revision as well as time to recap any issues	Students to indicate problem areas	
may	revision	As per student needs		exam papers
june	revision starting A2	As per student needs		exam papers

Assessment objectives
AO1 Demonstrate knowledge and understanding of terms, concepts, theories, methods and models
AO2 Apply knowledge and understanding to various business contexts to show how individuals and organisations are affected by and respond to issues
AO3 Analyse business issues, showing an understanding of the causes, costs and consequences for individuals and organisations
AO4 Evaluate evidence to make informed judgements and propose evidence-based solutions to business issues

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Subject: **Sports Science A2** Pearson Edexcel 9PE0	**Year 12/13 mixed class**	**Teacher: N Lavin**
No. of lessons per week: 5	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
		Over the year the students need to cover the following areas to complete the AS level - Scientific principles of PE, Psychological and Social principles, Practical Performance and analysis. These areas are then built upon to include the A2 course and the coursework requirements for A2.		
Sept	**Healthy and active lifestyles Anat and Phys**	Develop understanding of the history of active leisure and recreation What is a healthy lifestyle? Understand the effects of exercise physiological. Apply fitness and training principles.	Auditory - Discussion, in small workshop groups. Feedback and write up findings.	Mini project, presentations.
October	Opportinities and Pathways Psychological aspects.	Apply knowledge of the development of competitive sport using critical thinking. Begin performance hours and performance diaries Learning Theories, Behavioural theories.	Kinaestethic - Produce flow charts and tables showing opportunities to develop in sporting pathways.	Presentations., mini texts, exam type questions on topic from past papers.

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November	Pathways to elite Sport Sociological Aspects.	Identify performance pathways. Begin analysing own performance with training diary critical analysis of performances. Use quantitative and qualitative analysis techniques. Begin notational analysis of key performance opportunities.	Kinaesthetic - Produce flow charts and tables showing opportunities to develop in sporting pathways.	Presentations., mini texts, exam type questions on topic from past papers.
December	Lifelong involvement	Write a detailed timeline to show understanding of lifelong involvement in Sport and physical activity. What are the benefits of lifelong involvement in Sport?	Visual - Use tables and diagrams to summarise key points	Produce timeline of key points to show understanding.
January	**The critical sports performer**	Practice identified analysis techniques on a variety of performances. Apply them to your own performances.	Visual - Use tables and diagrams to summarise key points	Notational analysis findings
February	The leader and the official as a role model. Sport as a political tool	Identify the key features to analyse for a leader or an official. What are the roles and responsibilities? Ways in hich the globalisation of sport has facilitated its use as a political tool.	Kinaesthetic - perform as the roles and write up the key findings	Identification of key points in exam style questioning
March	Cousework preperation and completion	Develop final coursework pieces including 27 hours of video performance showing understanding, applying and analysing for improvement. Written Coursework focusing on the analysis and training plans.	All varied - produce video coursework of practical performances.	Video coursework
April	Exam cafes, preparation and exam technique	Exam practice and past papers to develop examination technique	All	Exam past papers
May	Analysis of performance	Completion of analysis of performance showing understanding of objective analysis using notational	Visual	Produce written coursework findings, video interview can also be included.

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	coursework completion	techniques, Write and/or video to include a personal development plan.		
June	Revision for final examination	Revision techniques to best prepare for the formal written papers.	All	Past paper results

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Subject: **PCE Matemáticas I**	**Year 12**	**Teacher: Begoña Folgueiras**
No. of lessons per week: 3	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
			Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	La evaluación será continua con vistas a la selectividad. Los exámenes contarán el 60% de la nota, el comportamiento y actitud en clase y la asistencia un 10% y el trabajo de casa un 30%. En los exámenes el 10% de la nota corresponderá a la presentación, ortografía y tildes, ya que en selectividad es muy valorado. Todos los exámenes serán de preguntas similares a las de los exámenes de selectividad.
			En todos los temas el estilo de aprendizaje está basado prácticamente en un estilo auditorio, donde el profesor expone la	

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			teoría y ejercicios y los alumnos escuchan para posteriormente practicar Los alumnos y alumnas han de leer, interpretar y redactar para la resolución de todos los ejercicios. En todos los temas se incluye aprendizaje visual al tener que leer e interpretar gráficos, datos y tablas	
September	**Álgebra** <u>Tema 1: Números reales</u>	Clasificar todos los números reales Conocer y usar las propiedades de los radicales y logaritmos. Calcular intervalos de valor absoluto		Ejercicios realizados durante la clase Ejercicios para entregar
October	<u>Tema 2: Polinomios y fracciones algebraicas</u>	Operaciones con polinomios Factorización de polinomios y regla de Ruffini. Operaciones con fracciones algebraicas		Ejercicios realizados durante la clase Ejercicios para entregar Examen
November	<u>Tema 3:</u>	Resolución de ecuaciones exponenciales, radicales y con x en el denominador Resolución de inecuaciones lineales y cuadráticas		Ejercicios realizados durante la clase Ejercicios para entregar.

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	Ecuaciones, inecuaciones y sistemas	Resolución de sistemas de ecuaciones e inecuaciones		Examen de ÁLGEBRA.
December	**Análisis** Tema 9: Funciones	Estudio de las funciones reales de variable real. Gráfica y tabla de una función. Descripción con la terminología adecuada de funciones dadas mediante sus gráficas. Utilización de tablas y gráficas funcionales para la interpretación de fenómenos sociales. Problemas de interpolación y extrapolación lineal.		Ejercicios realizados durante la clase Ejercicios para entregar
January	Tema 10: Límite de funciones	1. 2. Aproximación al concepto de límite de una función en un punto y en el infinito 3. Aproximación al concepto de continuidad. Estudio de continuidad de las funciones polinómicas, racionales, raíz, exponenciales y logarítmicas. 4. Cálculo de límites		Ejercicios realizados durante la clase Ejercicios para entregar

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February	Tema 11: Derivadas	Estudio del concepto de derivada de una función en un punto. Interpretación geométrica. Cálculode derivadas. Estudio de crecimiento y puntos críticos con derivada Utilización de las funciones como herramienta para la resolución de problemas relacionados con las ciencias sociales: Financieros, de población, etcétera, y para la interpretación de fenómenos sociales y económicos.		Ejercicios realizados durante la clase Ejercicios para entregar Examen de FUNCIONES.
March	**Estadística** Tema 5: Estadística unidimensional	Tiposde variables. Métodos estadísticos. Tablas y gráficos. Parámetros estadísticos de localización, de dispersión y de posición.		Ejercicios realizados durante la clase Ejercicios para entregar
March/April	Tema 6: Estadística bidimensional	Representación gráfica: Nube de puntos. Grado de relación entre dos variables estadísticas. Correlación. Covarianza. Coeficiente de correlación lineal. Regresión lineal		Ejercicios realizados durante la clase Ejercicios para entregar Examen
May		Cálculo de probabilidades en experimentos simples o compuestos.		Ejercicios realizados durante la clase

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	Tema 7: Probabilidad	Asignación de probabilidades. Estudio de la probabilidad en experimentos repetidos e independientes		Ejercicios para entregar Examen
	Tema 8: Distribucion binomial y normal	Uso de la distribución binomial. Asignación de probabilidades. La distribución normal. Normal típica y uso de tablas. Tipificación de una variable normal. Asignación de probabilidades. La normal como aproximación de la binomial.		Ejercicios realizados durante la clase Ejercicios para entregar Examen ESTADÍSTICA.
May/June	Repaso	Repaso con ejercicios de todo el curso		Examen FIN DE CURSO.
June	YEAR13 Tema 1: Matrices Tema 2. Determinantes	Iniciación al cálculo matricial y determinantes para iniciar el próximo curso con los conocimientos necesarios para poder trabajar fundamentalmente la geometría		Ejercicios realizados durante la clase Ejercicios de selectividad para entregar

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Year 12 2025-26 Contents

Subject: Selectividad Biología	**Year 12**	**Teacher: Begoña Folgueiras**
No. of lessons per week:	**Date: 2025-26**	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
Sept-Oct	Evaluación inicial de conocimientos previos		Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	Los resultados servirán para establecer los criterios de partida en la exposición del temario. Se irán realizando ejercicios de exámenes de selectividad de otros años correspondientes a la parte del temario que vayamos explicando.
	Tema 1: La materia viva	1. Identificar los elementos químicos y los tipos de compuestos que componen los seres vivos como base para conocer cualquier función biológica. 2. Reconocer la unidad química de los compuestos básicos de los organismos vivos, la diversidad que pueden alcanzar las moléculas de los polímeros biológicos, cuáles son sus sillares estructurales o monómeros, y clasificar los distintos principios inmediatos.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como	1.1. Explica los elementos químicos fundamentales que forman los seres vivos, compara su proporción en los seres vivos y en el resto de la Tierra y explica por qué el carbono es el elemento químico básico en la constitución de los seres vivos. 2.1. Define los conceptos de principio inmediato y de monómeros distinguiendo los diferentes grupos funcionales presentes en ellos, y cita las interacciones moleculares que mantienen las estructuras de las macromoléculas. 3.1. Identifica la estructura de la molécula de agua y sus propiedades físicas y químicas, en relación con sus funciones biológicas. 3.2. Define el concepto de pH y explica la importancia y el funcionamiento de los sistemas tampón.

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		3. Relacionar las propiedades fisicoquímicas del agua con su importancia en la composición, la estructura y la fisiología de los organismos vivos. 4. Reconocer la importancia de las sales minerales y su trascendencia en el equilibrio hidrosalino.	para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	4.1. Explica las dos formas en las que se presentan las sales minerales en los seres vivos y sus funciones biológicas, así como la acción osmótica y la importancia del equilibrio iónico, dada la acción específica de los iones.
	Tema 2: Los glúcidos	1. Identificar la naturaleza química de los glúcidos y clasificarlos en función de sus monómeros. 2. Destacar la importancia biológica de los carbonos asimétricos y su consecuencia: la estereoisomería de los monosacáridos. 3. Describir y explicar cómo se forma el enlace O-glucosídico y enumerar las funciones de los principales disacáridos. 4. Formular y describir los oligosacáridos y los polisacáridos y compuestos mixtos (peptidoglucanos y glucoproteínas) más importantes, y explicar sus funciones biológicas.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Clasifica los glúcidos y nombra y formula los principales monosacáridos describiendo sus funciones biológicas. 2.1. Define los distintos tipos de isomería que se presentan en los monosacáridos, formulando los enantiómeros y los epímeros de los diferentes monosaráridos, y halla las formas cíclicas (anómeros) de las pentosas y hexosas, relacionándolas con sus funciones; en especial, en la constitución de los polímeros. 3.1. Distingue los diferentes tipos de enlace O-glucosídico, describiendo los disacáridos más importantes y sus principales funciones biológicas. 4.1. Clasifica los polisacáridos por su estructura y por sus funciones biológicas, formulando la estructura esquemática de los más importantes oligosacáridos y polisacáridos y relacionándola con sus funciones biológicas.

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	Tema 3: Los lípidos	1. Reconocer la heterogeneidad del grupo de compuestos considerados lípidos y clasificarlos. 2. Reconocer, formular esquemáticamente y clasificar los ácidos grasos, y enunciar las características peculiares de alguno de sus derivados. 3. Identificar la estructura molecular de una grasa neutra y de un lípido de membrana, y construir las fórmulas de triacilglicéridos y fosfolípidos a partir de sus componentes. 4. Describir la estructura molecular de los terpenos y esteroides, y enumerar los diferentes tipos y sus funciones biológicas. 5. Comprender el comportamiento en medio acuoso de las moléculas de los lípidos y explicar sus propiedades para la constitución de las membranas.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Describe el concepto de lípido y conoce qué tienen en común este grupo de compuestos, y los clasifica utilizando diferentes criterios: químicos, estructurales y funcionales. 2.1. Escribe la fórmula general de un ácido graso, describiendo sus características químicas; clasifica los ácidos grasos con arreglo a la presencia de enlaces múltiples, enunciando las funciones biológicas de los derivados del ácido araquidónico. 3.1. Escribe las reacciones de esterificación y saponificación para formar o hidrolizar una grasa neutra y la fórmula de un fosfolípido sencillo, y representa esquemáticamente la estructura y la composición de los principales lípidos de las membranas celulares. 4.1. Realiza esquemas sencillos que representen la estructura molecular de los derivados del isopreno, clasifica los derivados terpenoides y enumera los terpenos y esteroides más importantes, indicando sus funciones biológicas. 5.1. Representa la molécula de un lípido que muestre su anfipatía, y explica los distintos tipos de dispersiones lipídicas, cómo se distribuyen las moléculas mediante esquemas sencillos, y las características de los comportamientos moleculares de los lípidos de membrana.
Nov-Dic	Tema 4: Proteínas y acción enzimática	1. Describir la estructura de los aminoácidos, sus propiedades y su clasificación, así como la formación del enlace peptídico. 2. Distinguir los tipos de estructura de las proteínas y comprender cómo la secuencia de aminoácidos contiene la información	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos.	1.1. Describe la fórmula general de los aminoácidos y sus propiedades, clasifica y explica la formación del enlace peptídico. 2.1. Describe las estructuras que adquieren las proteínas y las interacciones que las mantienen. Clasifica en niveles estructurales, explicando los conceptos de conformación y desnaturalización y la relación entre la estabilidad de la

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		que condiciona su forma (conformación) y, por lo tanto, su función. 3. Clasificar las proteínas por sus propiedades estructurales y relacionarlas con sus funciones biológicas. 4. Describir el mecanismo de la catálisis y enunciar las características de la acción enzimática. 5. Explicar la inhibición enzimática, clasificar sus tipos y comprender su relación con los mecanismos de regulación. 6. Conocer la existencia de los cofactores o coenzimas en la actividad enzimática y relacionarlos con el concepto de vitamina.	**R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	conformación de una proteína, su estructura primaria y su función. 3.1. Explica la clasificación de las proteínas por su composición, por su estructura y por sus funciones, y las características de su funcionalidad, su especificidad y su versatilidad. 4.1. Explica los conceptos de catalizador y de enzima, en qué consiste la catálisis y la cinética química, los mecanismos de actuación de los enzimas y las características de su acción, y los factores que influyen en esta. 5.1. Expone el concepto de inhibidor, los tipos de inhibición, los mecanismos de acción y de regulación de los enzimas alostéricos y las características específicas de estos. 6.1. Expresa el concepto de vitamina (clásico y moderno), la clasificación de los tipos de vitaminas, las funciones de estas y la relación entre los conceptos de coenzima y vitamina.
	Tema 5: Nucleótidos y ácidos nucleicos	1. Reconocer los nucleótidos como monómeros de los ácidos nucleicos e identificar sus componentes. 2. Conocer los distintos tipos de nucleótidos y ácidos nucleicos, clasificarlos e identificar su estructura primaria. 3. Describir la estructura secundaria de los ácidos nucleicos y reconocerlos como moléculas capaces de contener información.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto	1.1. Señala las distintas bases nitrogenadas indicando los nucleósidos y nucleótidos que forman, su clasificación y la formación del enlace N-glucosídico. 2.1. Menciona los principales nucleótidos libres (no nucleicos) y sus funciones, y formula esquemáticamente los distintos tipos de ácidos nucleicos (polinucleótidos), señalando qué tienen en común y cuáles son sus diferencias. 3.1. Describe el modelo de Watson y Crick para la estructura del ADN; diferencia los tipos de ARN, su estructura básica y sus funciones, y explica por qué los ácidos nucleicos pueden contener información.

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		4. Comprender la trascendencia del modelo de estructura del ADN y sus repercusiones para la Biología.	para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	4.1. Señala los datos experimentales que llevaron a la proposición del modelo de Watson y Crick y explica cómo contribuyó el descubrimiento del modelo de estructura del ADN a reforzar la hipótesis sobre su función.
	Tema 6: Teoría celular	1. Conocer los acontecimientos históricos más importantes en el desarrollo de la teoría celular, la correlación de los avances en su estudio con los descubrimientos tecnológicos y la importancia de las investigaciones de Ramón y Cajal en la universalización de la teoría celular. 2. Comprender las diferencias de estructura y comportamiento bioquímico más importantes entre procariotas y eucariotas y su relación evolutiva, así como el origen común de las células y las líneas básicas de la evolución celular. 3. Señalar las semejanzas y diferencias entre las células de los autótrofos y las de los heterótrofos, el origen de los orgánulos celulares, y explicar los condicionamientos generales responsables del tamaño y de la forma de las células.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se Tema 7: utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Explica el significado de la teoría celular y valora su importancia como teoría básica de la Biología, sus acotaciones en la actualidad, la importancia de los descubrimientos en microscopía en relación con el estudio de la célula y las aportaciones de Ramón y Cajal a la generalización de la teoría celular. 2.1. Compara la organización celular procariota y eucariota como la división fundamental entre los seres vivos, señalando similitudes y diferencias en su composición química, estructura y función, y comenta su relación evolutiva reseñando el origen común de las células y las líneas básicas de la evolución celular. 3.1. Enumera e interpreta las semejanzas y diferencias entre las células animales y las de las plantas, y la estructura interna de una célula eucariótica animal y una vegetal, y de una célula procariótica –tanto al microscopio óptico como al electrónico–, identificando sus orgánulos y describiendo la función que desempeñen.

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Ener-Febre	Tema 7: Envolturas celulares	1. Describir la estructura, la composición química y la función de la membrana plasmática. 2. Explicar los distintos tipos de transporte a través de las membranas celulares. 3. Comentar los tipos básicos de uniones intercelulares. 4. Conocer la estructura, composición química y función de los diferentes tipos de paredes celulares.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Comenta las diferencias y similitudes de los modelos de membrana plasmática propuestos por Danielli & Davson y Singer & Nicholson, indicando sus moléculas constitutivas y la disposición que estas adoptan, y explica la composición química y la función del glucocálix. 2.1. Analiza la necesidad del transporte a través de la membrana, cada uno de los tipos de transporte transmembrana y los distintos modelos de transporte por desplazamiento de la membrana celular. 3.1. Señala la forma y las características de los distintos tipos de uniones intercelulares. 4.1. Detalla la estructura y la composición química de la pared celular de las plantas, de los hongos y de las bacterias
	Tema 8: Orgánulos celulares I	. Desarrollar el concepto de hialoplasma y la naturaleza del citoesqueleto. 2. Detallar la composición química y explicar la estructura y las misiones de los orgánulos y estructuras no membranosas de la célula. 3. Enumerar y describir la estructura y función de cada una de las estructuras y orgánulos que	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto	1.1. Explica las características y misiones del hialoplasma, citando las funciones y los elementos componentes del citoesqueleto. 2.1. Señala la composición química, la estructura y la función de los ribosomas, los centriolos, los cilios, los flagelos y las inclusiones. 3.1. Describe el origen, la morfología y las funciones del retículo endoplasmático y del aparato de Golgi. 3.2. Describe el origen, la morfología, los tipos y las funciones de los lisosomas, los peroxisomas y las vacuolas.

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		constituyen el sistema de endomembranas de la célula.	para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	
Marzo-Abril	Tema 9: Orgánulos celulares II	1. Conocer las características del núcleo. 2. Conocer la morfología, los tipos, la estructura y la función de los cromosomas. 3. Describir y analizar la estructura y función de las mitocondrias y cloroplastos.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Conoce el origen, la morfología, la composición química y la actividad metabólica del núcleo. 1.2. Analiza la ultraestructura y la función de la cubierta nuclear, describiendo la estructura de un poro nuclear (complejo del poro), y señala las características de permeabilidad de esta envoltura. 1.3. Explica las características de la cromatina y describe la morfología, la composición química y la función del nucléolo. 2.1. Conoce la naturaleza de los cromosomas, su estructura, su clasificación y la terminología relacionada con ellos. 3.1. Describe las características, morfología, estructuras y componentes de las mitocondrias y señala su función metabólica. 3.2. Diferencia los distintos tipos de plastos, sus relaciones y sus respectivas funciones metabólicas, analizando la morfología de los cloroplastos en comparación con las mitocondrias.
	Tema 10: Ciclo celular	1. Desarrollar el concepto de ciclo celular y describir sus fases.	**V**: Se verán presentaciones y videos sobre diversos	1.1. Define ciclo celular, describiendo las características generales de la interfase y los acontecimientos de cada una de sus fases.

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	(Tema 12 del libro)	2. Definir mitosis, interpretar su función biológica y analizar sus fases. 3. Definir meiosis, analizar su función biológica, sus diferencias con la mitosis, su importancia genética, sus fases y la regulación del ciclo celular.	aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	2.1. Desarrolla el concepto de mitosis y explica la función biológica de este proceso, analizando los acontecimientos celulares que ocurren en cada fase, y explica el proceso de la citocinesis, detallando las diferencias que existen entre la citocinesis de células animales y la de las plantas. 3.1. Explica el concepto y la función biológica de la meiosis, detallando los procesos que tienen lugar en cada fase, y relacionando conceptos como quiasma, recombinación, sobrecruzamiento, variabilidad genética y formación de los gametos. 3.2. Cita las diferencias y similitudes entre el proceso mitótico y el meiótico, compara los mecanismos de la reproducción sexual y asexual, y explica la regulación del ciclo celular.
	Tema 11: Genética mendeliana (Tema 13 del libro)	1. Diferenciar los conceptos de herencia y genética. 2. Explicar las leyes de Mendel. 3. Resolver problemas de genética en los que se averigüe el genotipo a partir de cruzamientos con fenotipos conocidos. 4. Explicar la teoría cromosómica de la herencia. 5. Conocer las excepciones al modelo mendeliano. 6. Señalar las características de la herencia ligada al sexo y la	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como	1.1. Explica las diferencias entre genética y herencia, y define los términos relacionados con estos conceptos. 2.1. Describe los experimentos de Mendel. 2.2. Explica la terminología que permite trabajar la genética mendeliana. 2.3. Enuncia las leyes de Mendel y las explicaciones que actualmente se dan a los resultados que obtuvo, y las relaciones de dominancia. 3.1. Resuelve problemas de genética averiguando genotipos y aplicando el análisis estadístico a los resultados. 4.1. Define en qué consiste la teoría cromosómica de la herencia.

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		transmisión de caracteres ligados al sexo.	para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	5.1. Define los conceptos de epistasia, alelismo múltiple, genes letales y herencia poligénica; aplicándolos a algunos ejemplos. 5.2. Elabora esquemas de las distintas posibilidades de determinación del sexo. 6.1. Resuelve problemas de herencia ligada al sexo en casos sencillos.
Mayo-Junio	Tema 12: Sistema inmunitario (Tema 17 del libro)	1. Conocer la naturaleza de los mecanismos de defensa del organismo. 2. Analizar la composición del sistema inmunitario. 3. Explicar los conceptos de antígeno y de anticuerpo, sus características, estructura y forma de acción. 4. Conocer los mecanismos defensivos inespecíficos. 5. Conocer los mecanismos defensivos específicos.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Desarrolla el concepto de defensa orgánica los mecanismos de defensa tanto externos como internos. 2.1. Describe las células del sistema inmunitario, las relaciones existentes entre ellas, las funciones de los macrófagos, los diferentes tipos de linfocitos y su participación en la respuesta inmunitaria. 3.1. Expone los conceptos de antígeno y de anticuerpo describiendo sus características y modos de actuación. 4.1. Explica el proceso de la reacción inflamatoria y el funcionamiento del sistema de complemento. 5.1. Comprende cómo funcionan los mecanismos que conducen a la respuesta inmunitaria celular y a la humoral.
	Tema 13: Biotecnología (Tema 19 del libro)	1. Conocer el concepto de biotecnología, las características de los procedimientos biotecnológicos tradicionales y de la nueva	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.	1.1. Define biotecnología, diferencia los procedimientos biotecnológicos tradicionales y la nueva biotecnología, y explica los principales campos de trabajo que esta abarca.

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		biotecnología y los ámbitos de trabajo principales de esta. 2. Describir algunas técnicas utilizadas en ingeniería genética y su importancia en la evolución de la biotecnología. 3. Exponer las principales aplicaciones de la biotecnología al desarrollo de distintos campos, como la industria, la minería, la agricultura, la ganadería, el medio ambiente y la medicina.	**A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	2.1. Explica algunos procedimientos utilizados en ingeniería genética, reconociendo el avance que han supuesto en su desarrollo. 3.1. Explica el uso que se da a la biotecnología en la minería y en la industria, especialmente en la industria alimentaria. 3.2. Señala las principales aplicaciones de la biotecnología en la agricultura, la ganadería, la acuicultura y el medio ambiente. 3.3. Reconoce los principales usos de la biotecnología, en especial de la ingeniería genética, en el campo de la medicina.

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Year 12 Contents

Subject: **Quimica**	**Year 12**	**Teacher: Begoña Folgueiras**
No. of lessons per week: 3	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
			Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	
Sept-Oct	Evaluación inicial de conocimientos	1. Estequiometría 2. Ajuste de reacciones 3. Formulación orgánica e inorgánica		Los resultados servirán para establecer los criterios de partida en la exposición del temario.
	Tema 1: Estructura atómica de la materia. Teoría cuántica	1. Comprender algunos hechos experimentales de fines del siglo XIX y principios del XX que fueron determinantes en el conocimiento de la estructura del átomo. 2. Conocer los distintos modelos atómicos surgidos en el siglo XIX, haciendo especial hincapié en el modelo de Bohr. 3. Conocer las limitaciones del modelo de Bohr y que dieron lugar al modelo mecano-cuántico. 4. Conocer los principales conceptos en los que está basada la mecánica cuántica: dualidad onda-corpúsculo, principio de incertidumbre y función de onda.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para	1.1. Aplica los conceptos estudiados sobre espectros atómicos. Comprende los conceptos de frecuencia, longitud de onda y sabe relacionarlos entre sí; asimismo sabe situar una radiación dada en el espectro electromagnético. 1.2. Resuelve ejercicios y problemas para calcular

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			las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionamos gestos con algunos conceptos.	la frecuencia y la longitud de onda de una radiación absorbida o emitida por un átomo. Conoce la diferencia de energía entre dos niveles electrónicos: ecuación de Planck y efecto fotoeléctrico. 2.1. Expone algún hecho experimental que justifique la validez del modelo de Bohr. 3.1. Expone algún hecho o fenómeno que muestre las limitaciones del modelo de Bohr. 4.1 .Aplica adecuadamente los principales conceptos de la mecánica cuántica para resolver algunos sencillos ejercicios.
	Tema 2: Estructura electrónica de los átomos. Sistema periódico	1. Conocer el significado de los números cuánticos, así como los valores que pueden tomar. Justificar el tipo de orbitales y cuántos hay en cada nivel electrónico. 2. Utilizando los valores posibles de los números cuánticos, conocer las configuraciones electrónicas de los elementos químicos conocidos. 3. Conocer y comprender cómo se ha ido construyendo la Tabla Periódica y cómo está constituida: grupos (o familias) y períodos.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como	1.1. Justifica la validez o no de combinaciones de números cuánticos para un orbital o un electrón dado. 2.1. Utiliza el principio de construcción progresiva y escribe las configuraciones

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		4. Justificar el porqué de la ordenación de los elementos químicos, relacionándola con el número atómico. 5. Conocer algunas propiedades periódicas y cómo varían dentro del Sistema Periódico.	otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionamos gestos con algunos conceptos.	electrónicas de distintos elementos neutros y de sus iones. 3.1 .Estudia el Sistema Periódico: grupos y períodos. 4.1 .Relaciona la configuración electrónica de un elemento dado con el lugar que ocupa en el Sistema Periódico. 5.1 .Analiza algunas propiedades periódicas. 5.2Justifica la variación de las propiedades periódicas de una serie de elementos químicos en función del lugar que ocupen en la Tabla Periódica.
Nov-Dic	Tema 3: Enlace químico	1. Relacionar la configuración electrónica de la capa de valencia de los distintos elementos con el tipo de enlace químico que pueden formar. 2. Saber utilizar la regla del octeto y los diagramas de Lewis como un primer paso en el estudio del enlace químico. 3. Conocer las dos teorías cuánticas que describen el enlace covalente, justificando algunas propiedades características de dicho enlace. 4. Describir el enlace iónico, justificando por qué ciertas sustancias presentan dicho enlace, así como sus propiedades. 5. Describir el enlace metálico, justificando por qué los metales presentan dicho enlace, así como sus propiedades.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para	1.1. Explica la tendencia electrónica de un elemento dado, razonando sus posibilidades de formar enlace iónico o enlace covalente. 2.1. Utiliza la regla del octeto y los diagramas de Lewis en moléculas sencillas. 3.1. Justifica el enlace que presentan las

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			las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionamos gestos con algunos conceptos.	sustancias covalentes, sus propiedades más características y cómo varían estas de una sustancia a otra. 4.1. Justifica el enlace que presentan las sustancias iónicas, sus propiedades más características y cómo varían estas de una sustancia a otra. 5.1. Justifica el enlace que presentan las sustancias metálicas, sus propiedades más características y cómo varían estas de una sustancia a otra.
	Tema 0: Aspectos cuantitativos en química	1. Representar con fórmulas químicas diversas sustancias y las ecuaciones químicas que muestran sus cambios. 2. Conocer y comprender los conceptos de masa atómica, mol, volumen molar y las relaciones existentes entre ellos. 3. Conocer y comprender las diversas leyes de los gases, dedicando especial atención a la ecuación de estado de un gas ideal. 4. Conocer y saber utilizar los distintos modos de expresar la concentración de una disolución. 5. Conocer las leyes fundamentales de los cálculos estequiométricos.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para	1.1. Resuelve ejercicios sencillos de ajuste de reacciones químicas. 2.1. Sabe utilizar y relaciona entre sí las distintas unidades de masa y volumen, dedicando especial atención al concepto de mol. 3.1. Resuelve problemas y ejercicios sencillos aplicando, entre otras, la

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			las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	ecuación general de los gases ideales. 4.1 .Preparar disoluciones de concentración conocida. 4.2. Resuelve ejercicios y problemas sobre disoluciones. 4.3. Prepara una disolución de concentración dada a partir de otra disolución más concentrada. 5.1. Resuelve ejercicios y problemas sobre cálculos estequiométricos.
	Tema 4: Termoquímica.	1. Entender que toda reacción química lleva asociada un cambio energético: absorción o desprendimiento de energía. 2. Conocer y saber utilizar con autonomía las distintas magnitudes termodinámicas, así como las leyes que las relacionan: primer principio de la termodinámica y la ley de Hess como una particularización. 3. Entender los aspectos fundamentales del segundo principio de la termodinámica, y asociarlos al concepto de entropía o grado de desorden de un sistema. 4. Conocer y saber utilizar los factores de los que depende la espontaneidad de una reacción química.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios.	1.1. Define y entiende los distintos conceptos fundamentales de la termoquímica. 2.1. Resuelve ejercicios y problemas aplicando el primer principio de la termodinámica. 2.2. Resuelve ejercicios y problemas de aplicación directa de la ley de Hess. 2.3. Aplica el primer principio de la termodinámica en el cálculo de energías de

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			K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	formación o energías de reacción. 3.1. Enuncia y comprende el segundo principio de la termodinámica. 4.1. Justifica la espontaneidad, o no, de una reacción química dada en función de la temperatura, variación de entropía y variación de entalpía.
Ener-Febr	Tema 5: Cinética química	1. Conocer y explicar los principales conceptos cinéticos, destacando la ausencia de relación entre los aspectos energéticos y los cinéticos. 2. Comprender las ideas fundamentales acerca de la teoría de colisiones. 3. Conocer y comprender los distintos factores que inciden en la velocidad de una reacción química. 4. Valorar la importancia que tienen los catalizadores en la cinética de una reacción dada.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Resuelve ejercicios y problemas sencillos derivados del cálculo de las magnitudes cinéticas fundamentales en una reacción química dada. 2.1. Aplica la teoría de colisiones a una reacción química dada. 3.1. Justifica cómo afecta a la velocidad de una reacción la variación de diversos factores, tales como la temperatura, la concentración, etc. 4.1. Conoce los tipos de catalizadores y cómo

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				modifican la velocidad de un proceso químico dado.
	Tema 6: Equilibrio químico	1. Conocer y saber aplicar la ley del equilibrio químico. 2. Conocer el concepto de cociente de reacción y utilizarlo para determinar si un sistema está, o no, en equilibrio químico. 3. Conocer los distintos tipos de equilibrio y saber aplicarlos a problemas concretos. 4. Relacionar los diversos conceptos estudiados en el equilibrio químico. 5. Conocer los factores que afectan al equilibrio químico y saber aplicarlos a algunos procesos industriales de especial interés.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Aplica la ley del equilibrio químico a diversas reacciones químicas para obtener la expresión de la constante de equilibrio. 1.2. Relaciona las constantes de equilibrio K_p y K_c para una reacción dada. 1.3. Resuelve ejercicios y problemas de aplicación de la ley del equilibrio químico: cálculos numéricos de constantes y determinación de las cantidades de todas las sustancias presentes en el equilibrio. 2.1. Resuelve ejercicios y problemas de cálculos de cociente de reacción, justificando el sentido en el que evolucionará el sistema en caso de no encontrarse en equilibrio. 3.1. Resuelve ejercicios y problemas de equilibrios heterogéneos.

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				3.2. Resuelve ejercicios y problemas de equilibrios de solubilidad. 4.1. Realiza ejercicios y problemas que relacionen todos los conceptos fundamentales estudiados para el equilibrio. 5.1. Aplica el principio de Le Châtelier a reacciones generales en equilibrio. 5.2. Aplica el principio de Le Châtelier a procesos de industriales, biológicos o medioambientales de especial relevancia.
Marz-Abril	Tema 7: Ácidos y bases	1. Conocer y comprender los conceptos fundamentales en las distintas teorías ácido-base. 2. Aplicar la ley del equilibrio químico para calcular las concentraciones de las especies presentes en un equilibrio ácido-base, y saber relacionar las constantes de acidez y de basicidad de cualquier par ácido-base conjugado. 3. Conocer el concepto de pH y su relación con el producto iónico del agua. 4. Valorar la importancia del pH en diversos procesos biológicos, industriales, caseros, etc. 5. Comprender y saber estimar los procesos de hidrólisis de sales, de las disoluciones reguladoras y su influencia en el pH. 6. Conocer las valoraciones ácido-base, y entenderlas como una valiosa técnica en el análisis químico	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios.	1.1. Aplica los conceptos de ácido-base de Arrhenius y Brönsted-Lowry en el reconocimiento de sustancias que puedan actuar como tales. 1.2. Completa reacciones entre pares ácido-base conjugados de Brönsted-Lowry. 2.1. Resuelve ejercicios y problemas en equilibrios de disociación de ácidos o

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			K: Se realizarán correcciones con gestos por parte de la profesora y relacionamos gestos con algunos conceptos.	bases débiles. Calcula grados de disociación. 3.1. Resuelve ejercicios y problemas de cálculos de pH de distintas disoluciones, tanto para electrolitos fuertes como débiles. 4.1. Describe situaciones de la vida diaria donde se manifieste la importancia del pH. 5.1. Justifica la variación del pH al producirse la disolución de algunas sales, y calcula en algunos casos sencillos, el pH de la disolución resultante. 6.1. Planifica alguna experiencia sencilla donde se aprecia la utilidad de las valoraciones ácido-base. 6.2. Calcula la concentración de una disolución desconocida, y elige el indicador adecuado en la detección del punto final.

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	Tema 8: Reacciones de oxidación-reducción	1. Comprender los principales conceptos en las reacciones de oxidación-reducción y relacionarlos con numerosos procesos que ocurren en nuestra vida diaria. 2. Ajustar ecuaciones o procesos redox utilizando los métodos más usuales, principalmente el método del ion-electrón. 3. Conocer el concepto de equivalente aplicado a procesos de oxidación-reducción. 4. Plantear alguna experiencia sencilla de laboratorio donde tenga lugar un proceso redox y encontrar alguna aplicación práctica de interés. 5. Comprender la relación existente entre proceso redox, corriente eléctrica y sus aplicaciones tecnológicas; por ejemplo, las pilas. 6. Entender los fenómenos de electrólisis y sus aplicaciones en la sociedad.	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Calcula números de oxidación para los átomos que intervienen en un proceso redox dado. 1.2. Identifica reacciones de oxidación y de reducción en procesos que puedan tener diversas aplicaciones en la sociedad. 2.1. Resuelve ejercicios de ajuste estequiométrico en procesos redox que transcurren en medio ácido. 2.2. Resuelve ejercicios de ajuste estequiométrico en procesos redox que transcurren en medio básico. 3.1. Determina masas equivalentes en procesos de oxidación-reducción. 4.1. Calcula la concentración de una disolución mediante una volumetría redox. 5.1. Resuelve ejercicios y problemas de

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				representación de pilas y cálculo de su *f.e.m.* 5.2. Aplica los criterios de espontaneidad para predecir si una determinada reacción redox va a tener lugar. 6.1. Resuelve ejercicios y problemas relativos a fenómenos de electrólisis.
May- Jun	Tema 9: Química orgánica	1. Diferenciación entre los distintos tipos de isómeros estructurales y espaciales de un compuesto dados fórmula o nombre. 2. Deducción tipos de ataque a un sustrato orgánico en función de estructura y grupos funcionales. 3. Predicción de los productos de una reacción orgánica conocidos los reactivos. 4. Formulación y nomenclatura de los monómeros más comunes. 5. Identificación del tipo de polimerización que puede sufrir un determinado monómero. 6. Escritura de las reacciones de polimerización por adición o condensación de los polímeros estudiados. 7. Identificación de los monómeros de que está formado un polímero, dada su estructura química. 8. Identificación de los enlaces que unen los monómeros de las macromoléculas	**V**: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales. **A**: La profesora explicará en clase el tema haciendo interactuar a los alumnos. **R/W**: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	1.1. Describe algunas de las propiedades más importantes de los elementos más característicos del Sistema Periódico, relacionándolas con su configuración electrónica. 2.1. Escribe las reacciones más características de los elementos no metálicos del Sistema Periódico, haciendo hincapié en las reacciones de obtención. 3.1. Escribe las reacciones más características de los elementos metálicos del Sistema Periódico,

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				haciendo hincapié en las reacciones de obtención. 4.1. Enuncia las propiedades más características de los compuestos de hidrógeno, oxígeno, nitrógeno y azufre, así como su relación en algunos procesos de especial interés, como pueden ser los industriales y los medioambientales.
	Repaso	Repaso de todo el temario Preparación de trabajo para el verano		

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Year 12 2025-26 Contents

Subject: **PCE Economía de Empresa**	**Year 12**	**Teacher: Miguel Ángel Vera Ortega**
No. of lessons per week: 2	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
Se avanzará a un ritmo de 1 tema cada 2 ó 3 semanas			Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	La evaluación será continua con vistas a la selectividad. Los exámenes contarán el 60% de la nota, el comportamiento y actitud en clase y la asistencia un 10% y el trabajo de casa un 30% En los exámenes el 10% de la nota corresponderá a la presentación, ortografía y tildes, ya que en selectividad es muy valorado.
Trimestre de Otoño: Sept-Octubre	Tema 1: La empresa	1. Conocer la naturaleza de la empresa, sus funciones en la economía y sus diferentes tipos. 2. Conocer la función del empresario, su evolución y su papel en la empresa. 3. Hacer una primera aproximación de conjunto a los diferentes elementos que componen la empresa.	**V**: Powerpoint sobre el temario. Se harán esquemas y mapas conceptuales que ayuden a organizar ideas en cada uno de los temas **A/R/W**: Se seguirá el libro de	Estos temas se vieron el curso pasado, por lo que se hará un repaso de ellos y un examen escrito. Trabajo de casa y en clase. Se mandan para casa los

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		4. Aprender la naturaleza y la función de cada elemento y las áreas funcionales de la empresa.	texto, realizando los ejercicios del mismo. Además, se realizarán textos escritos con definiciones y temas cortos, enfocados a las necesidades para selectividad. El alumno reforzará el aprendizaje auditivo realizándose exposiciones de powerpoint por su parte al finalizar alguno de los temas. También se organizarán debates y, al final, los alumnos se harán preguntas unos a otros. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	ejercicios del libro y otro material que entregará la profesora
	Tema 2: La empresa en su entorno	1. Entender que la empresa se mueve en un entorno económico, social, cultural y político que influye sobre ella. 2. Aprender los factores de los que depende el diferente tamaño de las empresas y las formas en que se produce el crecimiento de la empresa, con especial referencia a los procesos de internacionalización que le afectan. 3. Conocer los efectos de la globalización sobre el funcionamiento de la empresa, la naturaleza de la nueva empresa global y los requerimientos de responsabilidad social que cada día son más importantes. 4. Conocer los efectos de la globalización en la vida empresarial.		
	Tema 3: Las funciones de dirección I	1. Conocer la función directiva de gestión y la naturaleza del comportamiento humano en la empresa. 2. Conocer las funciones directivas de liderazgo, motivación y comunicación, así como los factores que influyen en su eficaz ejercicio. 3. Conocer los nuevos modelos para mejorar la gestión del comportamiento humano y la forma en que se aplican.		
Trimestre de Otoño: Nov-Dic	Temas 6 y 7: La función productiva de la empresa			
	Tema 5: Los recursos humanos en la empresa		**V**: Powerpoint sobre el temario. Se harán esquemas y mapas conceptuales que ayuden a organizar ideas en cada uno de los temas	

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Trimestre de Invierno: Ene-Febr	Tema 10: La función financiera en la empresa- financiación	1. Conocer la función financiera de la empresa y su entorno. 2. Conocer los ciclos financieros de la empresa. 3. Conocer las fuentes internas y externas de financiación de la empresa, su naturaleza y problemática. 4. Introducirse en el análisis económico-financiero a través de sus indicadores.	**A/R/W**: Se seguirá el libro de texto, realizando los ejercicios del mismo. Además, se realizarán textos escritos con definiciones y temas cortos, enfocados a las necesidades para selectividad. El alumno reforzará el aprendizaje auditivo realizándose exposiciones de powerpoint por su parte al finalizar alguno de los temas. También se organizarán debates y, al final, los alumnos se harán preguntas unos a otros. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	Examen escrito de temas vistos. Trabajo de casa y en clase Se mandan para casa los ejercicios del libro y otro material que entregará la profesora
	Tema 11: La función financiera de la empresa- la inversión	1. Conocer la naturaleza de la inversión, sus magnitudes y los flujos que implica. 2. Conocer los significados de la homogeneización financiera, de la capitalización y de la actualización. 3. Aprender los distintos tipos de criterios estáticos de selección de inversiones. 4. Aprender los distintos tipos de criterios dinámicos de selección de inversiones.		
	Tema 12: La contabilidad de la empresa	1. Conocer la composición del patrimonio de la empresa y la naturaleza de las diversas masas patrimoniales. 2. Conocer la estructura y el significado de las cuentas anuales de la empresa. 3. Aprender la utilidad y la importancia de la contabilidad y aprender a ubicar las principales cuentas.		
	Tema 13: Análisis de los estados	1. Estudio sobre el estado contable de la empresa 2. Análisis financiero 3. Análisis de rentabilidades 4. Análisis patrimonial		

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	contables de la empresa			
Trimestre de Primavera: Marzo-Abril	Tema 14: La fiscalidad de la empresa	1. Conocer el sistema directivo de la empresa y los elementos que intervienen en los procesos de toma de decisiones. 2. Conocer la naturaleza y los componentes de la planificación y la dirección estratégica. 3. Conocer la utilidad de las matrices estratégicas y la naturaleza de los procesos de control en el interior de la empresa.		Examen escrito de los temas vistos. Trabajo de casa y en clase Se mandan para casa los ejercicios del libro y otro material que entregará la profesora
	Tema 3: Las funciones de dirección I	1. Conocer la función directiva de gestión y la naturaleza del comportamiento humano en la empresa. 2. Conocer las funciones directivas de liderazgo, motivación y comunicación, así como los factores que influyen en su eficaz ejercicio. 3. Conocer los nuevos modelos para mejorar la gestión del comportamiento humano y la forma en que se aplican.		
	Tema 4 : Las funciones de dirección II	1. Conocer los conceptos de organización y de estructura orgánica de la empresa, y aprender a realizar organigramas. 2. Conocer la naturaleza y las formas de la estructura organizativa de la empresa. 3. Conocer los diferentes tipos de estructuras organizativas existentes, con especial referencia a las nuevas formas organizativas que se aplican en el mundo de la empresa		
Trimestre de Verano: Mayo-Junio	Tema 12: El proyecto empresarial	1. Conocer la actividad emprendedora, qué factores la fomentan y dónde se lleva a cabo. 2. Conocer las formas en que pueden surgir los negocios y las empresas y los pasos necesarios que hay que dar para ponerlos en marcha.	**V**: Powerpoint sobre el temario. Se harán esquemas y mapas conceptuales que ayuden a organizar ideas en cada uno de los temas	Examen escrito de temas 1 al 12. Trabajo de casa y en clase Se mandan para casa los ejercicios del libro

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		3. Conocer las dificultades que se presentan en el proceso de puesta en marcha de un negocio. 4. Aplicar con un caso práctico los conocimientos teóricos adquiridos.	**A/R/W**: Se seguirá el libro de texto, realizando los ejercicios del mismo. Además, se realizarán textos escritos con definiciones y temas cortos, enfocados a las necesidades para selectividad. El alumno reforzará el aprendizaje auditivo realizándose exposiciones de powerpoint por su parte al finalizar alguno de los temas. También se organizarán debates y, al final, los alumnos se harán preguntas unos a otros. **K**: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.	y otro material que entregará la profesora. Se hará otro examen del proyecto empresarial presentado en clase y abarcando ya todo el temario. A continuación se realizarán exámenes de selectividad de años anteriores.
	Repaso	Repaso de todo el temario para posteriormente realizar exámenes de selectividad		

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Year 12 Contents

Subject: Spanish A Level YSP01 Specification	Year group: 12	Teacher: **Carmen Jiménez Mª Elena Con**
No. of lessons per week: 2	Date: **2025-26**	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	Teaching & Learning Styles (VARK):**Visual**:**Auditory**:**Read/Write**: **Kinaesthetic**:	**Assessment Criteria; tests/ projects etc.**
Autumn Term	AS Unit1 AS Unit 2 A2 Unit 3	Spoken Expression and Response in Spanish Understanding and Written Response in Spanish Oral Presentation	Reading, Listening and Writing activities- Oral Presentation: choice of topic for debate, writing of 1 minute oral presentation, and practice debates in groups	Exam Papers Units 1-2-3 Oral Presentation
Spring Term	A2 Unit 4	Study of film:"Ocho apellidos vascos" Discursive essay writing techniques. Creative essay writing	Watching the film and completion of activities from a reading guide. Individual essay writing based on "Ocho apellidos vascos" Discursive and creative essay writing	Research based essay writing Discursive essay writing Creative essay writing

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Summer Term	Unit 1-2-3 revision Unit 4 practice			**External Exams** **Units1-2-3- 4**

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Year 12 2025-26 Contents

Subject: Spanish	**Year 12**	**Teacher: Mª Angeles Alvarez**
No. of lessons per week: 5	**Date:**	2025-26

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
			Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	
September / October	**Topic Area 1 Youth matters**	Family relationships and friendships Peer pressure and role models Music and fashion Technology and communication **Grammar**: present tense, adjectives and expressing future. Imperfect/preterit. possessives, comparison **Skills**: AS writing task **Vocabulary:** La familia, Los jóvenes, La tecnología, La música y la moda.	**Visual**: ppp for grammar and vocabulary, video clips, photos **Auditory**: Listening activities from textbook , AS papers. Listening to teacher and students. **Read/Write:** Activities from textbook, Grammar book , Reading and writing tasks from AS papers, and the media **Kinaesthetic**: Role plays, Presentations, matching cards	After every Topic: 1 AS Unit 2. Exam Paper: Understanding and Written Response 2 Grammar tests 3 Writing task practice 4 Oral task from past papers
November/ December	**Topic Area 2 Lifestyle, health and fitness**	Food and diet Sport and exercise Health issues Urban and rural life	**Visual**: ppp for grammar and vocabulary, video clips, photos **Auditory**: Listening activities from textbook , AS papers. Listening to teacher and students.	After every Topic: 1 AS Unit 2. Exam Paper: Understanding and Written Response 2 Grammar tests

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		Grammar: gender of nouns, subjunctive, definite/indefinite articles. **Skills**: AS writing task **Vocabulary:** La salud	**Read/Write:** Activities from textbook, Grammar book , Reading and writing tasks from AS papers, and the media **Kinaesthetic**: Role plays, Presentations, matching cards	3 Writing task practice 4 Oral task from past papers
January/ February	**Topic Area 3 Environment and travel**	Tourism, travel and transport Natural disasters and weather Climate change and its impact Energy, pollution and recycling **Grammar:** Preterite and imperfect contrast, uses of subjunctive, DO and IO pronouns, **Skills:** AS writing task **Vocabulary:** El medio ambiente,	**Visual**: ppp for grammar and vocabulary, video clips, photos **Auditory**: Listening activities from textbook , AS papers. Listening to teacher and students. **Read/Write:** Activities from textbook, Grammar book , Reading and writing tasks from AS papers, and the media **Kinaesthetic**: Role plays, Presentations, matching cards	After every Topic: 1 AS Unit 2. Exam Paper: Understanding and Written Response 2 Grammar tests 3 Writing task practice 4 Oral task from past papers
March/April	**Topic Area 4 Education and employment**	Education systems and types of schooling Pupil/student life Volunteering and internships Jobs and unemployment **Grammar:** Passive, gender of professions **Skills**: writing task **Vocabulary:** La educación, el mundo laboral	**Visual**: ppp for grammar and vocabulary, video clips, photos **Auditory**: Listening activities from textbook , AS papers. Listening to teacher and students. **Read/Write:** Activities from textbook, Grammar book , Reading and writing tasks from AS papers, and the media	After every Topic: 1 AS Unit 2. Exam Paper: Understanding and Written Response 2 Grammar tests 3 Writing task practice 4 Oral task from past papers

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			Kinaesthetic: Role plays, Presentations, matching cards	
May	**Preparation and practice for AS examination:** Unit1: Spoken expression and response Unit2: Understanding and written response			**EXTERNAL EXAM:** Unit 1: Spoken Expression and Response Unit 2: Understanding and written response.

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Year 12 2025-26 Contents

Subject: Spanish ELE AS	Year group:12	Teacher: Mª Ángeles Álvarez
No. of lessons per week: 5 Approx. 3 Units per term	Date: **2025-26**	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
September/ October	**Topic Area 1** **Youth matters**	Family relationships and friendships. Peer pressure and role models Music and fashion Technology and communication **Grammar**: present tense, adjectives and expressing future. Imperfect/preterit. possessives, comparison **Skills**: AS writing task **Vocabulary:** La familia, Los jóvenes, La tecnología, La música y la moda.	**Visual**: ppp for grammar and vocabulary, video clips, photos **Auditory**: Listening activities from textbook and AS papers **Read/Write:** Activities from every unit , Reading and writing tasks from AS papers, and the media **Kinaesthetic**: Role plays, Presentations, matching cards,	After every unit: 1 AS Unit 2. Exam Paper: Understanding and Written Response 2 Grammar tests 3 Writing task practice 4 Oral tasks from past papers
November/ December	**Topic Area 2** **Lifestyle, health and fitness**	Food and diet Sport and exercise Health issues Urban and rural life	**Visual**: ppp for grammar and vocabulary, video clips, photos **Auditory**: Listening activities from textbook and AS papers	As above

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		Grammar: gender of nouns, subjunctive, definite/indefinite articles. **Skills**: AS writing task **Vocabulary:** La salud	**Read/Write:** Activities from every unit , Reading and writing tasks from AS papers, and the media	
January/ February	**Topic Area 3** **Environment and travel**		**Visual**: ppp for grammar and vocabulary, video clips, photos **Auditory**: Listening activities from textbook , AS papers. Listening to teacher and students. **Read/Write:** Activities from textbook, Grammar book , Reading and writing tasks from AS papers, and the media **Kinaesthetic**: Role plays, Presentations, matching cards	As above
March/ April	**Topic Area 4** **Education and employment**			As above
May/June	**Preparation and practice for AS examination:**			**EXTERNAL EXAM:**

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	Unit1: Spoken expression and response Unit2: Understanding and written response	Tourism, travel and transport Natural disasters and weather Climate change and its impact Energy, pollution and recycling **Grammar:** Preterite and imperfect contrast, uses of subjunctive, DO and IO pronouns, **Skills:** AS writing task **Vocabulary:** El medio ambiente, Education systems and types of schooling Pupil/student life Volunteering and internships Jobs and unemployment **Grammar:** Passive, gender of professions **Skills**: writing task **Vocabulary:** La educación, el mundo laboral		Unit 1 Spoken Expression and Response. Unit 2: Understanding and written response.

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		This Scheme of Work for GCE Spanish AS (Year 12) is based on two terms, with the remaining time to be used for examination techniques and tips, revision, practice, and the AS examination **Throughout Term 1 of Year 12, teachers should work with students on the following:** • Using a bilingual dictionary • Learning and recording vocabulary • Organising work • Writing a brief description • Expressing opinions • Reading for gist • Pronunciation • Taking notes in English and in the target language when listening • Writing summaries in English and in the target language • Speaking from notes • Understanding and interpreting statistics		

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		• Pronunciation of more difficult sounds **Throughout Term 2 of Year 12, teachers should work with students on the following:** • Writing a newspaper report or email • Structuring a written response • Checking and correcting written work • Strategies for extending vocabulary • Revision of vocabulary • General revision techniques • Continued pronunciation and spelling practice • Specific practice of unit 1 stimulus card responses • Guiding their choice of General Topic Area according to their individual strengths and interests **The following Scheme of Work is based around:** Edexcel Spanish for A Level, Hodder Education, 2008 – Student's Book		

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		Edexcel Spanish for A Level, Hodder Education, 2008 – Teacher's Resource Book Edexcel Spanish for A Level, Hodder Education, 2008 – Dynamic Learning Network Edition		

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Contents

Subject: Media Studies 9607	**Year 12**	**Teacher: Mrs Burrow**
No. of lessons per week: 5	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
			Teaching & Learning Styles (VARK): **Visual, Auditory, Read / Write, Kinaesthetic**	
September	Research into magazines Analysing 5 minute drama sequences.	Codes and conventions Genre Photography skills	V - use of film, images, prezis A - listening to podcasts, other students and teacher R - articles, textbooks and reviews K - layout through collage, cutting out magazines	Blog posts
October	Representation and media language	Analysis Media language Structuring responses	V - use of film, images, prezis A - listening to podcasts, other students and teacher R - articles, textbooks and reviews K - layout through collage, cutting out magazines	Past papers
November	Planning magazine project	Flat plans Brand identify Brand values Target audience	V - watching and analysing online magazine videos A - listening to podcasts commentaries R - reading analyses K - storyboarding and creating mind maps	Blog posts

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December	Representation and media language	Analysis Media language Structuring responses	V - watching and analysing clips A - discussions and teacher talk R - reading and writing exam papers K - constructing and designing mise-en-scene	
January	Production	Using Serif PHotoPlus Sizing Layout Colour Photography	V - prezis and slides presentations A - listening to the rest of the group R - reading each others´ work, researching magazine production K - producing a range of different planning material and organising them	Blog posts
February	Production	Using Serif PHotoPlus Sizing Layout Colour Photography	V - Magazine project A - listening to feedback and audio, discussions R - reading and writing evaluative material K - using space in the best way to produce a short film	
March	Production and evaluation	Using Serif PHotoPlus Sizing Layout Colour Photography	V - magazine project and evaluation A - listening to feedback and audio, discussions R - reading and writing evaluative material K - organising blog	Blog posts
April	Case studies - institution and audiences	3 case studies on film distribution and audience appeal Viral marketing	V - watching different media A - listening to feedback, discussions R - reading exam papers and research material K - mind map, posters and design work	Past papers
May		3 case studies on film distribution and audience appeal Viral marketing	V - watching different media A - listening to feedback, discussions R - reading exam papers and research material K - mind map, posters and design work	Past papers

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June		3 case studies on film distribution and audience appeal Viral marketing	V - watching different media A - listening to feedback, discussions R - reading exam papers and research material K - mind map, posters and design work	Past papers

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Contents

Subject: **Global Perspectives & Research Cambridge 9239**	Year group: 12	Teacher: M.Galiana
No. of lessons per week: 5	Date: **2025-26**	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
			Teaching & Learning Styles (VARK): **Visual**: **Auditory**: **Read/Write:** **Kinaesthetic**:	
September October	The critical path Global Issues Question cards A Learner's Guide to the Cambridge Research Report Research design The core stages of research design Reflecting upon your research design Introduction for	Introduction writing skills Collect information, ideas and arguments Question information, ideas and arguments Reflect on information, ideas, arguments and issues	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay An email to a government minister describing their findings and outlining what the government might do to limit the impact of global warming Group research

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	components 2,3,4			
October November	AO1 AO2 AO3 Stage 1. Selecting your topic Component 2: essay Component 3: team project	Methodological skills comprise the attributes you will need to design and carry out a research project. Such skills include the ability to select the best methods to use to answer a question, the ability to devise a research question and the ability to make sense of your findings and write them up in a way that answers your question.	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Group research The project should show evidence that students have worked with students from another culture, community or country. Group production of a project plan.
November December	Stage 2. Developing your research question Component 2: essay Component 3: team project Component 4: Cambridge research report (outline proposal form) Introducing deconstruction: analysing and evaluating arguments and evidence	Critical thinking skills include the ability to detect bias, evaluate different arguments and types of evidence together with the ability to reflect on your own learning and argue different perspectives.	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Exam Practice exam paper The focus of the Written Paper is enquiry, reasoning and evaluation. In response to a stimulus based on listed topics

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December January	Stage 3. The practical and personal considerations of research design Stage 4. Desk Research: identifying, searching and reviewing the literature Stage 5. Selecting your methods Deconstruction with reconstruction: organising sources and perspectives	• maintain and use a research log in support of the research process • select and analyse appropriate concepts, arguments, perspectives and evidence from a range of source material • analyse and use relevant and credible evidence in support of arguments and overall perspectives • analyse relevant perspectives, showing awareness of how the arguments, claims and the nature of the evidence are used to support conclusions	Research on the internet Reading different information Presentations Posters Mind Mapping Debates Collect detailed digital photographs Put together an exhibition or poster showing the different perspectives of how the worlds need for energy has to change together with written commentary	Exercise books Individual research
January February	Stage 6. Gathering Primary Data Stage 7. Analysing your data Deconstruction, reconstruction and	• communicate clearly throughout the report using appropriate academic terms, referencing and citation techniques • provide an oral explanation and justification of	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Project research

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	reflection: planning the essay Communication: writing the essay	your own report findings, choice and use of research methods and methodology.		
February March	Stage 8. Writing up your Cambridge Research Report Research ethics Plagiarism Submitting guide	• evaluate specific research methods and methodology • evaluate and synthesise evidence to draw reasoned conclusions • evaluate and synthesise alternative perspectives and interpretations in order to make your own reasoned personal judgments • reflect on the scope, nature and limitations of your own research report, and how and why your own personal viewpoints of the issue/s researched may have changed during the research process	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Project research
March April	Stage 8. Writing up your Cambridge Research Report Reviewing Assessment Tracking progress Preparations for A Level exams	Design own questions for research Plan and design own essay and response to this issue Combining different sources of information using statistics and tables	Research on the internet Reading different information Presentations Posters Mind Mapping Debates Contact other schools and organizations	Exercise books Essay Project research Exam

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			Demonstrate understanding of this issue on a global scale Make recommendations	
April May	Preparations for A Level exams	Collect information, ideas and arguments Question information, ideas and arguments Reflect on information, ideas, arguments and issues	Research on the internet Reading different information Presentations Posters Mind Mapping Debates	Exercise books Essay Project research
June	Preparations for A Level exams	Same competencies during September-April Writing past papers under exam conditions	Past paper practice	Final exam

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Subject: Historia del Arte	**Year group: 12**	**Teacher: Manuel Galiana**
No. of lessons per week: 2	**Date: 2025-26**	

Time scale (approximate)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
Aprox. 1 o 2 unidades al mes			En todas las unidades didácticas de una u otra forma, y basándonos siempre en los contenidos propuestos para su comprensión y aprendizaje, utilizaremos la gamificación, las TIC, estrategias expositivas, el sistema de pregunta-respuesta y debates utilizando el método socrático.	En cada trimestre, el alumnado deberá realizar un trabajo de investigación basado en los contenidos propuestos (individual o de grupo), que posteriormente será expuesto en clase. En cada una de las unidades didácticas 2-14 el alumnado realizará una serie
Septiembre	El arte: función, tipologías, técnicas y conservación.	1. ¿Qué es el Arte? 2. Función del Arte. 3. La arquitectura 4. La escultura 5. La pintura 6. Las artes menores 7. ¿Cómo comentar una obra de arte? 8. ¿Cómo interpretar una obra de arte?		
Septiembre-Octubre	Arte griego	1. Introducción. Los órdenes. 2. El templo griego: el Partenón. 3. La escultura. El «kuros». Los grandes maestros de los siglos V y IV a.C.: Policleto y Fidias. Praxíteles y Scopas. Lisipo y su canon. 4. El período helenístico.	Partenón Templo de Niké Áptera Erecteion Discóbolo Diadúmeno Doríforo	

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			Hermes Apoxiómeno Victoria de Samotracia Laocoonte y sus hijos	de tareas basadas en los contenidos tratados. Al final de cada unidad se realizará una prueba objetiva, del mismo formato que la prueba de Selectividad. Para superar la materia, se realizarán en el trimestre varias pruebas escritas, no siendo ninguna de ellas eliminatorias. Si el alumno no supera la prueba escrita o la recuperaciones, con 5 puntos sobre 10, tendrá una nueva posibilidad en la evaluación extraordinaria.
Octubre-Noviembre	Arte romano	1. Arquitectura y ciudad. 2. Escultura. El retrato y el relieve histórico. 3. Explicar la ciudad romana: sus partes y construcciones más relevantes que la integran, explicando las distintas tipologías arquitectónicas.	Maison Carreé Panteón Coliseo Augusto de Prima Porta Ara Pacis Marco Aurelio Columna Trajana Acueducto de Segovia Acueducto de Tarragona Arco de Cáparra	
Noviembre	Paleocristiano y Bizantino	1. La nueva iconografía: la pintura de las catacumbas. La cristianización de la basílica. 2. Los edificios bizantinos y la cúpula: Santa Sofía. 3. La decoración musivaria.	Santa Sofía Mosaicos de San Vital	
Noviembre - Diciembre	Arte Hispanomusulmán	1. Arte e islam. 2. Arquitectura. Arte califal: la mezquita de Córdoba, arquitectura y decoración. La ciudad palatina de Medina Azahara. 3. Arte almohade. El arte nazarí: la Alhambra y el Generalife.	Mezquita de Córdoba La Giralda La Alhambra	
Enero	Prerrománico	1. Arte visigodo 2. Arte carolingio 3. Arte asturiano 4. Arte mozárabe	San Pedro de la Nave San Julián de los Prados San Salvador de Valdediós San Miguel de Lillo	

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Enero-Febrero	Románico	1. Introducción al románico. 2. Arquitectura. Elementos formales y soluciones constructivas. La iglesia de peregrinación y el monasterio. 3. Escultura y pintura.	San Vicente de Cardona San Martín de Frómista Catedral de Santiago Pórtico de la Gloria Claustro Silos Frescos Taüll y San Isidoro de León	
Febrero	Gótico	1.Características generales de la arquitectura gótica. 2. La ciudad: la catedral y los edificios civiles. 3. La escultura: portadas y retablos. 4. La pintura italiana del «Trecento»: Florencia y Siena. 5. Los primitivos flamencos del siglo XV: los hermanos van Eyck.	Catedral de Chartres Catedral de León Catedral de Burgos Santa Capilla Virgen Blanca de Toledo Portada del Sarmental La Anunciación Lamento sobre Cristo muerto Adoración del cordero místico Virgen de los consejeros	
Marzo	Arte Renacentista y Manierista.	1. Introducción al Renacimiento. 2. El «Quattrocento» italiano. Arquitectura: Brunelleschi y Alberti. Escultura: Donatello y Ghiberti. Pintura: Fra Angélico, Masaccio, Piero della Francesca y Botticelli. 3. El «Cinquecento» y la crisis del Manierismo en Italia. Arquitectura: Bramante, Miguel Ángel y Palladio. Escultura: Miguel Ángel. Pintura: Leonardo, Rafael y Miguel Ángel. La escuela veneciana: Tiziano. 4. España. Arquitectura: del Plateresco al Escorial. Escultura: los primeros imagineros: Berruguete y Juni. Pintura: El Greco.	Santa María San Lorenzo Rucellai Puertas del baptisterio David Anunciación Nacimiento de Venus La primavera San Pietro in Montorio Villa Rotonda Virgen de las rocas Gioconda Escuela de Atenas	

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			Cúpula de San Pedro David Piedad Juicio final Lavatorio El jardín de las delicias El Escorial Santo Entierro Sacrificio de Isaac El entierro del conde de Orgaz	
Marzo - Abril	Arte Barroco	1. La arquitectura en Italia y Francia. Las plantas alabeadas de Bernini y Borromini. El palacio clasicista francés: Versalles. 2. Escultura en Italia: Bernini. 3. Pintura en Italia. El naturalismo y los problemas de la luz: Caravaggio. El clasicismo en los frescos de los Carracci. 4. La pintura en Flandes y en Holanda: Rubens y Rembrandt. 5. La arquitectura barroca española. El urbanismo: la Plaza Mayor. 6. La gran imaginería: Andalucía, Castilla y Murcia. 7. La pintura barroca. El naturalismo tenebrista: Ribera y Zurbarán. Realismo barroco: Velázquez y Murillo.	San Carlos de la Cuatro Fuentes Plaza de San Pedro Apolo y Dafne Baldaquino Éxtasis de Santa Teresa Entierro de Cristo Conversión de San Pablo Muerte de la Virgen Las tres Gracias Lección de anatomía La ronda de noche Vista de Delft Obradoiro Piedad Inmaculada Joven mendigo Rendición de Breda	

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			Las hilanderas Las Meninas	
Abril	Rococó y Neoclasicismo.	1. Rococó: arquitectura, escultura y pintura. 2. Características generales del Neoclasicismo. Las Academias. 3. Arquitectura: Juan de Villanueva. Escultura: Canova. Pintura: David.	Museo del Prado Eros y Psique Paulina Bonaparte El juramento de los Horacios	
Mayo	El Siglo XIX: El Arte de un Mundo en Transformación.	1. Francisco de Goya. 2. Introducción. Romanticismo: Delacroix. Realismo: Courbet. 3. Arquitectura. Historicismos. Edificios de hierro y cristal. El Modernismo. 4. Impresionismo: Monet, Renoir y Degas. Las esculturas de Rodin. 5. Postimpresionismo: Cézanne, Gauguin y van Gogh.	Familia de Carlos IV Maja desnuda Saturno devorando a sus hijos Fusilamientos del 3 de mayo Torre Eiffel Puertas del infierno El beso El pensador La libertad guiando al pueblo Impresión, amanecer Los jugadores de cartas Noche estrellada Casa Batlló La Pedrera	
Mayo - Junio	La Ruptura de la Tradición: el Arte en la Primera Mitad del	1. Escultura: innovaciones en materiales y técnicas. 2. La arquitectura del movimiento moderno. Racionalismo: Le Corbusier. Organicismo: Frank Lloyd Wright. 3. La pintura. Las vanguardias históricas: Fauvismo, Cubismo, Expresionismo alemán, Dadaísmo y Surrealismo.	Bauhaus Villa Saboya Casa de la cascada El profeta El grito	

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	Siglo XX.		Las señoritas de Avignon Guernica Fuente	
Junio	La Universalización del Arte desde la Segunda Guerra Mitad del Siglo XX.	1. La arquitectura al margen del «Estilo Internacional»: Posmodernidad, High-tech y Deconstructivismo. 2. El Minimalismo en la escultura 3. El movimiento abstracto y sus tendencias pictóricas: el Expresionismo abstracto norteamericano, el Informalismo europeo y la Abstracción geométrica 4. Las principales corrientes figurativas: Pop-Art, «Nueva figuración» e Hiperrealismo.	Lata de sopa Campbell	

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Contents

Subject: Fundamentos del Arte	**Year group:** 12	**Teacher:** Manuel Galiana
No. of lessons per week: 3	**Date: 2025-26**	

Week	**Topics/ Learning Objectives/**	**Activities**	**Resources**	**Assessment**	**Key vocabulary and key questions**	**Notes**
1 -8 Septiembre -Octubre	Bloque 2. Visión, realidad y representación (HT1): - Arte precolombino y africano - Sistemas de representación espacial - Impresionismo y Postimpresionismo - Realismo e Hiperrealismo - Surrealismo - Abstracción - El cuerpo humano en el arte	Introducción a distintas tradiciones artísticas, análisis formal, comparación de estilos y representación. Competencias: análisis visual, síntesis crítica, expresión oral.	Google Classroom and Drive Web Uned	**Assessment Criteria** En todas las unidades didácticas de una u otra forma, y basándonos siempre en los contenidos propuestos para su comprensión y aprendizaje, utilizaremos la gamificación, las TIC, estrategias expositivas, el sistema de	-Luz -Color -Movimiento -Pincelada rápida -Técnica modernista -Impresionismo -Exótico -Orientalizante -Medievalista	-Atención a la diversidad (Dislexia): -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura

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				pregunta-respuesta y debates utilizando el método socrático. Exámenes (100 %)		insertados en extensiones.
9-16 Noviembre-Diciembre	**Topics** Bloque 3. El arte clásico y sus proyecciones (HT2): - Arte griego: arquitectura, escultura, cerámica - Influencia griega en Roma - Retrato romano - Arquitectura de la romanización a la Edad Media - Renacimiento clásico - Neoclasicismo y pintura metafísica	-Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas -Proyección videos -Análisis formal y estético -Ejercicio expresión oral de detección de influencias -Discusión y análisis de contextos -Extensión "Importante" -Extensión "Curiosidad": Video "De revivals, neos y otros términos históricos" -Extensión "Reflexiona"		**Assessment Criteria** -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados **Marking** Exámenes (100 %)	-Materiales -Simetría -Regularidad -Horizontalidad -Técnicas de construcción -Ligereza -Flexibilidad	-Atención a la diversidad (Dislexia): -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura insertados en extensiones.

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17-23 Enero-Febrero	**Topics** Bloque 4. Arte y expresión (HT3): - Barroco: pintura y escultura - Romanticismo - Expresionismo alemán y Fauvismo - Dadaísmo, Ready Made y Fluxus	-Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas -Proyección videos -Análisis formal y estético -Ejercicio expresión oral de detección de influencias -Discusión y análisis de contextos -Extensión "Importante" -Ficha "Comprueba lo aprendido" -Extensión "Reflexiona" -Resumen escrito fin de tema	-Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual	**Assessment Criteria** -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados **Marking** Exámenes (100 %)	- Tendencia arquitectónica -Innovación Técnica -Exposición Universal - Claroscuro	-Atención a la diversidad (Dislexia): -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura insertados en extensiones.
24-28 Marzo-abril	**Topics** Bloque 5. Naturaleza, sociedad y comunicación en el arte (HT4):	-Introducción oral -Proyección digital -Lectura de contenidos pdf	-Libro de texto -Documentos digitales -Proyector	**Assessment Criteria** -Asistencia, participación, atención	-Cartones -Costumbrismo -Humanismo -Tensión anatómica	-Atención a la diversidad (Dislexia): -Uso de textos adaptados

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	- Modernismo y arquitectura orgánica - Bauhaus y Art déco - Hierro, vidrio y movimiento moderno - Arte y medios: del cartel al pop art - Minimalismo - Arte digital y videoarte - Arte y ecología - Arte colaborativo y urbano	-Visualización diapositivas -Proyección videos -Análisis formal y estético -Ejercicio expresión oral de detección de influencias -Discusión y análisis de contextos -Extensión "Para saber más" Video Viaje a la Luna -Extensión "Curiosidad" -Extensión "Comprueba lo aprendido" -Extensión "Importante" -Ficha "Reflexiona". -Resumen escrito fin de tema	-Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual	-Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados **Marking** Exámenes (100 %)	-Organicismo - Movimiento modern - Reproducción - Vanguardia - Conceptual	-Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura insertados en extensiones.
29-40 Mayo-junio	**Topics** _Revisión general de los bloques 2-5 y preparación de examen final.	-Introducción oral -Proyección digital -Lectura de contenidos pdf	-Libro de texto -Documentos digitales -Proyector	**Assessment Criteria** -Asistencia, participación, atención		-Atención a la diversidad (Dislexia): -Uso de textos adaptados

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	Síntesis y preparación para pruebas externas. Competencias: repaso global, autonomía de estudio, autoevaluación.	-Visualización diapositivas -Proyección videos -Análisis formal y estético -Ejercicio expresión oral de detección de influencias -Discusión y análisis de contextos -Extensión "Para saber más" -Extensión "Importante" -Ficha "Comprueba lo aprendido".	-Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual	-Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados **Marking** Exámenes (100 %)		-Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura insertados en extensiones.

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Subject: **Art**	**Year 12**	**Teacher:** **Adrian Cortadi Rodriguez**
No. of lessons per week: 5 **As Art & Design AQA spec 7202**	**Date:** **2025-26**	

Time scale	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
Sept-Oct Nov	Learn the assessment objectives that students will be graded on. Learn how to develop an idea. How to experiment with an idea. How to use the work of other artists/designers to inspire. How to write about your work and how to be critical in a way that promotes	- **Learn about what is expected** of an AS/A2 Lvl art student. What the Coursework Book is for and how it should be put together. Initial planning and research into a theme. Photographs and drawings as research tools. The coursework book shows planning prep. and understanding for a final work of art. - **Inspiration. Research. Experiment. Freedom.** - **Start** to follow a pathway and see where it takes you. - **EFIA:** - **Expression** - **Fluidity** - **Impasto** - **Atmosphere**	**Visual**: Suggested artists: **Rembrandt, Chuck Close, Picasso, Warhol, Caravaggio, Lichtenstein, Käthe Kollwitz, Khalo, Kippenberger, Ensor Rego, Klimt, James Rosenquist, Christian Schad, Frank Auerbach, Lucian Freud, Morris Katz, Alex Katz, Modigliani, Arcimboldo, Matisse, Utamaro, Ydañez.** **Auditory**: material and documentary films. **Read/Write: key vocabulary**: Chiaroscuro, Tone, fragmentation, overlapping, texture, features, modelling, color modulation, flesh tones, negative shapes, composition, form, expression, shape, line,	**Portfolio** **AO1: Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding.** **AO2: Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops.** Observation, contribution and research. Sketchbooks, participation in class, independent work, classwork books, final outcomes, written

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	development. Skills for rendering final artworks successfully.	- **First-Hand Studies** from Primary Sources. -**'Secondary' images from research** into another culture, artist or artistic movement. Copies of artwork. Analysis of this artwork with particular reference to context (context of relevance to Your Ideas and to the context in which the artwork was made). In words and pictures how the work of this artist etc. can help you in your work. - **Start to apply techniques** and processes used to the topic. (EFIA) - **Ambitious 'finished' work.** **- Evidence of continued development** of research as in previous weeks. - **An Evaluation** of the whole project.	likeness, subjective, objective, drapery, detail, under painting, gesture. Shiny. Rough. Pattern. Scaly. Scratched. Colored. Broken **Kinaesthetic**: Assessment objectives met. Completed units of work in a Coursework Book, fully evaluated and developed. Final works of art.	notes for supporting ideas, observation, contribution and research. Assessment by the teacher, classwork grades, weekly homework grades. Personal tracker. Also, assessment opportunities to take place through constant dialogue.
<u>Dec-Jan-Feb</u>	**PERSONAL PROJECT DEVELOPMENT Component 1-**	- **Recap on what is expected** of an AS Level art student. - **What the Coursework Book is for** and how it should be put together. - **Continue planning and research** into the personal project topic. **Photographs and drawings as research tools.** Coursework Book shows planning prep and understanding for a final work of art.	**Visual**: Suggested artists: **Edward Hopper, Richard Diebenkorn, John Virtue, Michael Andrews, Oskar Kokoshka, John Piper, Magritte, Canaletto, Charles Sheeler, Georgia O'Keeffe, LS Lowry, Leger, Pieter De Hooch, George Grosz, Richard Estes, Walter Sickert, Stanley Spencer, Carel Weight, Escher.** **Auditory**: material and documentary films.	**Portfolio** **AO3: Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress** **AO4: Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements**

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		- **Working on AO3** (Assessment Objective 3): **-** Planning prep. time for the final piece. Prep. of supporting studies, sketches. **-Working on AO4**: Present a personal and meaningful response action plan.	**Read/Write: key vocabulary**: Illumination, Tone, aerial perspective, fragmentation, overlapping, texture, features, perspective, negative shapes, composition, form, expression, atmosphere, subjective, objective, detail, under painting, gesture, medium, mood, monumentality, architecture, abstraction **Kinaesthetic**: Sketches, paintings, collages, computer aided art photo manipulation.	Observation, contribution and research. Sketchbooks, participation in class, independent work, classwork books, final outcomes, written notes for supporting ideas, observation, contribution and research. Assessment by the teacher, classwork grades, weekly homework grades. Personal tracker. Also, assessment opportunities to take place through constant dialogue.
March-April May-	**FINAL PIECE & PERSONAL EVALUATION** **- Component 1**	Students work on a finished outcome or a series of related finished outcomes. Practical elements should make connections with some aspect of contemporary or past practice of artist(s), designer(s), photographers or craftspeople and include written work of no more than 1000 words which evaluates and concludes the practical work.	**Visual**: Suggested artists: **Depending on the topic.** **Auditory**: Depending on topic **Read/Write: key vocabulary**: depending on topic **Kinaesthetic**: depending on topic	Observation, contribution and research. Sketchbooks, participation in class, independent work, classwork books, final outcome/s, written notes for supporting ideas Assessment by the teacher, classwork grades, weekly homework grades. Personal tracker. Also, assessment opportunities to take place through constant dialogue.

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Year 12 AS Level Geography				
Subject: Geography (Syllabus 9696)		Year: 12	Teacher: Mrs WilMo	
No. of lessons per week: 5	Exam Board: Cambridge		Date: 2025-26	
Time scale (approx)	**Topic**	**Curriculum concepts/ skills and competencies**	**Teaching & Learning Styles (VARK): Visual, Auditory, Read / Write, Kinaesthetic**	**Assessment Criteria; tests/ projects etc.**
Term 1 HT1 September	Topic 1: Hydrology and fluvial geomorphology	This topic considers the drainage basin as a system of outputs, stores and flows. Learners should also understand the discharge relationships in drainage basins. River channel processes and landforms are also covered, as is the human impact on these elements. 1.1 The drainage basin system 1.2 Discharge relationships within drainage basins 1.3 River channel processes and landforms 1.4 The human impact	Texts: Hodder Cambridge International AS and A Level Geography Cambridge Resources Auditory : Weekly discussions using texts and knowledge of relevant current case studies. Oral presentations by students. Student's use of TV and radio to be aware of current issues. Read / Write:	Continuous teacher / self and peer assessment of written work and discussions. Past Paper Qs. Mock exams – Dec Final Exam - May
October	Topic 2: Atmosphere and weather	This topic allows learners to develop an understanding of energy budgets over a range of scales. From this basis learners should be able to describe and explain weather processes and phenomena and how humans impact upon these systems. 2.1 Diurnal energy budgets 2.2 The global energy budget 2.3 Weather processes and phenomena		

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		2.4 The human impact	Continual use of textbooks and websites to research topics, create notes, answer exam questions, create short presentations. Student's use of newspapers / new websites to be aware of current issues. Visual: Using a variety of image-based resources including maps, tables and graphs. Student's use of TV and radio to be aware of current issues. Kinaesthetic: Fieldwork	
HT2 November		Learners should understand the global pattern of tectonics and the resulting landforms and processes. At a more local scale learners should be able to describe and explain weathering and slope processes and how humans can impact upon this. 3.1 Plate tectonics 3.2 Weathering 3.3 Slope processes 3.4 The human impact		
December	Topic 1 - 3	Review of learning objectives and understanding Case study application practice Exam Command Word - what are they really asking?		
Term 2 HT3 January	Topic 4: Population	This topic considers population change and how this informs models such as the DTM. This leads onto the relationship between population size and resource availability. Learners should develop a case study of how we can manage natural increase and the associated issues. 4.1 Natural increase as a component of population change 4.2 Demographic transition 4.3 Population–resource relationships 4.4 The management of natural increase		
February	Topic 5: Migration	Learners should be able to explain how migration forms a component of population change. They should be able to		

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		explain what pushes and pulls people from and to locations and how we can manage internal migration. 5.1 Migration as a component of population change 5.2 Internal migration (within a country) 5.3 International migration 5.4 The management of international migration		
Term 3 HT4 March	Topic 6: Settlement dynamics	This topic considers the changing settlement dynamics in both rural and urban areas. Learners should be able to describe and explain the changing structure of urban settlements and how this is managed. 6.1 Changes in rural settlements 6.2 Urban trends and issues of urbanisation 6.3 The changing structure of urban settlements 6.4 The management of urban settlements		
April	Topic 4 - 6 Review	Review of learning objectives and understanding Case study application practice Exam Command Word - what are they really asking?		
May	Topics 1-6	Revision of course materials, exam paper practice, case study exploration in preparation for exams Paper 1 Physical Geography Paper 2 Human Geography		CIE Exam
June	A2 Topics	Students explore and practise for A2 Geography - choosing topics from: Physical Geography (two options)		

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		Tropical Environments Coastal Environments Hazardous Environments Hot arid and semi-arid environments Human Geography (two options) Production, location and change Environmental management Global Interdependence Economic transition		

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Subject: **PCE Matemáticas Aplicadas**	**Year 12**	**Teacher: Lidia Jiménez**
No. of lessons per week: 3	**Date:** 2025-26	

Time scale	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
Aprox 1,3 temas por mes			En todos los temas el estilo de aprendizaje está basado prácticamente en un estilo auditorio, donde el profesor expone la teoría y ejercicios y los alumnos escuchan para posteriormente practicar Los alumnos y alumnas han de leer, interpretar y redactar para la resolución de todos los ejercicios. En todos los temas se	

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			incluye aprendizaje visual al tener que leer e interpretar gráficos, datos y tablas	
September	**Álgebra** <u>Tema 1: Números reales</u>	Clasificar todos los números reales Conocer y usar las propiedades de los radicales y logaritmos. Calcular intervalos de valor absoluto		Ejercicios realizados durante la clase Ejercicios para entregar
October/ November	<u>Tema 2: Polinomios, ecuaciones e inecuaciones</u>	Operaciones con polinomios Factorización de polinomios y regla de Ruffini. Operaciones con fracciones algebraicas Resolución de ecuaciones exponenciales, logarítmicas, radicales y con x en el denominador Resolución de inecuaciones lineales y cuadráticas		Ejercicios realizados durante la clase Ejercicios para entregar Examen
November	<u>Tema 3: Sistemas de ecuaciones y de inecuaciones</u>	Resolución de sistemas de ecuaciones lineales y no lineales Resolución de sistemas de inecuaciones con una incógnita Resolución de sistemas de inecuaciones con dos incógnitas		Ejercicios realizados durante la clase Ejercicios para entregar Examen

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December	**Análisis** <u>Tema 4: Funciones</u>	Estudio de funciones reales de variable real. Gráfica y tabla de una función. Descripción con la terminología adecuada de funciones dadas mediante sus gráficas. Utilización de tablas y gráficas. funcionales para la interpretación de fenómenos sociales. Problemas de interpolación y extrapolación lineal.		Ejercicios realizados durante la clase Ejercicios para entregar Examen
January/ February	<u>Tema 5: Límite de funciones</u>	Aproximación al concepto de límite de una función en un punto y en el infinito Aproximación al concepto de continuidad. Estudio de continuidad de las funciones polinómicas, racionales, raíz, exponenciales y logarítmicas. Cálculo de límites		Ejercicios realizados durante la clase Ejercicios para entregar Examen

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February/ March	Tema 6: Derivadas	Estudio del concepto de derivada de una función en un punto. Interpretación geométrica. Cálculo de derivadas. Estudio de crecimiento y puntos críticos con derivada Utilización de las funciones como herramienta para la resolución de problemas relacionados con las ciencias sociales: Financieros, de población, etcétera, y para la interpretación de fenómenos sociales y económicos.		Ejercicios realizados durante la clase Ejercicios para entregar Examen
March / April	**Probabilidad** Tema 7: Probabilidad	Cálculo de probabilidades en experimentos simples o compuestos. Asignación de probabilidades. Estudio de la probabilidad en experimentos repetidos e independientes		Ejercicios realizados durante la clase Ejercicios para entregar Examen

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April	Tema 8: Distribuciones de probabilidad	Uso de la distribución binomial. Asignación de probabilidades. La distribución normal. Normal típica y uso de tablas. Tipificación de una variable normal. Asignación de probabilidades. La normal como aproximación de la binomial.		Ejercicios realizados durante la clase Ejercicios para entregar Examen
May	**Estadística** Tema 9: Estadística unidimensional	Tipos de variables. Métodos estadísticos. Tablas y gráficos. Parámetros estadísticos de localización, de dispersión y de posición.		Ejercicios realizados durante la clase Ejercicios para entregar Examen
June	Tema 10: Integrales (Introducción Y13)	Integrales indefinidas Reglas de integración Métodos de integración (por partes, racionales, por sustitución)		Ejercicios realizados durante la clase Ejercicios para entregar

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Year 12 AS Level Computer Science (CIE 9618)							
Subject: Computer Science						Teacher: P. Reichenbach	
Number of lessons per week: 5						Date: 2025-26	
Weeks (approx)	Topic (theory)	Curriculum concepts/ skills and competencies	Weeks (approx)	Topic (programming)	Curriculum concepts/ skills and competencies	Teaching & Learning Styles	Assessment Criteria; tests/ projects etc.
1 - 3	Topic 1 - Information representation	1.1 Data Representation 1.2 Multimedia – Graphics, Sound 1.3 Compression	1 - 10	Topic 9 - Algorithm Design and Problem-Solving	9.1 Computational Thinking Skills 9.2 Algorithms	Texts: Hodder Cambridge International AS and A Level Computer Science Cambridge Resources Weekly discussions using texts and knowledge of relevant current case studies. Oral presentations by students.	Continuous teacher / self and peer assessment of written work and discussions. Past Paper questions. Mock exams – January Final Exam - May
3-5	Topic 3 - Hardware	3.1 Computers and their components 3.2 Logic Gates and Logic Circuits	10 - 17	Topic 10 - Data Types and structures	10.1 Data Types and Records 10.2 Arrays 10.3 Files 10.4 Introduction to Abstract Data Types (ADT)		
6-8	Topic 4 - Processor Fundamentals	4.1 Central Processing Unit (CPU) Architecture 4.2 Assembly Language 4.3 Bit manipulation	17 - 24	Topic 11 - Programming	11.1 Programming Basics 11.2 Constructs 11.3 Structured Programming		

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8-10	Topic 2 - Communication	2.1 Networks including the internet		Continual use of textbooks and websites to research topics, create notes, answer exam questions, create short presentations. Student's use of newspapers / new websites to be aware of current issues.	
11-12	Topic 7 - Ethics and Ownership	7.1 Ethics and Ownership			
13-14	Topic 6 - Security, privacy and data integrity	6.1 Data Security 6.2 Data Integrity			
15 - 16	Topic 5 - System Software	5.1 Operating System 5.2 Language Translators			
17 - 19	Topic 12 - Software Development	12.1 Program Development Lifecycle 12.2 Program Design 12.3 Program Testing and maintenance			
20 - 24	Topic 8 - Databases	8.1 Database Concepts 8.2 Database Management System (DBMS) 8.3 Data Definition Language (DDL) and Data Manipulation Language (DML)			

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Subject: French	**Year 12**	**Teacher:V Bernard**
No. of lessons per week: 5	**Date:** 2025-26	

Time scale (approx)	**Topics**	**Curriculum concepts/ skills and competencies**	**Learning styles**	**Assessment Criteria; tests/ projects etc.**
		Teaching & Learning Styles (VARK): **In every lesson; Modern Foreign Languages teaching requires activities providing for these four learning styles.** **e.g** **Visual: Powerpoint presentation/flashcards for new vocabulary** **Auditory: Listening exercises, drilling from teacher.** **Read/Write: Included in textbook practice and part of MFL assessment** **Kinaesthetic:Acting up transitional language, thinking skills exercises** **VARK also included in the use of digital textbook and interactive exercises** **The first year of International AS level French covers four GTA's (General Topic Area) which are:** **Topic Area 1 – Youth matters** **Topic Area 2 – Lifestyle, health and fitness** **Topic Area 3 – Environment and travel** **Topic Area 4 – Education and Employment**		
Sept/Oct	**Topic Area 1 – Youth matters**	To be able to discuss different types of family units	Teaching & Learning Styles (VARK):	Punctual vocabulary/ grammar tests; peer assessed and checked by teacher. End of unit test, four skills assessed, exam type questions, mixed of peer/self

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	Subtopic: Family relationships and friendships **Subtopic: Peer pressure and role models**	To be able to discuss relationships within the family To be able to discuss attitudes to marriage and relationships To be able to discuss what makes a good friend Differences between generations Peer pressure in relation to music and fashion Peer pressure in relation to behaviour and habits How to deal with peer pressure Pop stars, celebrities and sports people as role models	**Visual**: use of pictures/videos and PowerPoint **Auditory**: Listening exercises in textbook,video clips, assessment Love songs in French **Read/Write:** basic and extended exercises in textbook, newspaper articles **Kinaesthetic**:Multimedia use,	assessment, checked by teacher with feedback
November	**Topic Area 1 – Youth matters** **Subtopic: Music and Fashion** **Subtopic: Technology and communication**	The importance of music and fashion in the lives of young people Francophone musicians The place of Francophone music in the world Paris the fashion capital of the world. The importance of following fashion The advantages and disadvantages of technology Are we too dependent on technology? The role of technology in education and the work place	Teaching & Learning Styles (VARK): **Visual**: use of pictures/videos and PowerPoint **Auditory**: Listening exercises in textbook,video clips, assessment **Read/Write:** basic and extended exercises in textbook/book software, newspapers articles **Kinaesthetic**:Multimedia use	Punctual vocabulary/ grammar tests; peer assessed and checked by teacher. End of unit test, four skills assessed, exam type questions, mixed of peer/self assessment, checked by teacher with feedback

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December/January	**Topic Area 2 – Lifestyle, Health and Fitness** **Subtopic: Food and Diet** **Subtopic: Health issues** **Mock examination & Feedback week** **Subtopic:** **Sport and Exercise**	Eating disorders Different types of food and meals Food as a reflection of culture Famous French chefs The importance of food in society What is a balanced diet Major health issues in society The health service What is a healthy lifestyle? The work/life balance How to encourage people to take exercise and to play sport Should sport be compulsory at school?	Teaching & Learning Styles (VARK): **Visual**: use of pictures/videos and PowerPoint **Auditory**: Listening exercises in textbook assessment **Read/Write:** basic and extended exercises in textbook/book software **Kinaesthetic**Multimedia use-Powerpoint presentation	Punctual vocabulary/ grammar tests; peer assessed and checked by teacher. End of unit test, four skills assessed, exam type questions, mixed of peer/self assessment, checked by teacher with feedback

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		The importance of the Olympic Games and other major sporting events		
February	**Topic Area 3 – Environment and travel** **Subtopic: Tourism, travel and transport** **Subtopic: Natural disasters and weather** **Subtopic: Climate change & Energy/pollution**	The advantages, disadvantages and popularity of different types of transport The importance of travel Different types of tourism The impact of tourism on a community Different types of natural disasters Case study of the consequences of a natural disaster The effects of different types of weather on people and their ways of life What is climate change? The causes of climate change The effect of climate change on the planet Different types of energy (e.g. renewable energy / fossil fuels / nuclear energy) The causes and consequences of pollution How can we reduce pollution?	Teaching & Learning Styles (VARK): **Visual**: use of pictures/videos and PowerPoint **Auditory**: Listening exercises in textbook assessment **Read/Write:** basic and extended exercises in textbook/book software **Kinaesthetic**:Multimedia use.	Punctual vocabulary/ grammar tests; peer assessed and checked by teacher. End of unit test, four skills assessed, exam type questions, mixed of peer/self assessment, checked by teacher with feedback This chapter: focus on reading and listening
March/April			Teaching & Learning Styles (VARK):	Punctual vocabulary/ grammar tests; peer assessed and checked by teacher.

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	Topic Area 4 – Education and employment **Subtopic: Education systems** **Subtopic: Pupil/student life**	Different types of school The baccalaureate and other exams Education systems in Francophone countries Single-sex versus mixed education Issues at school (e.g. subject choices, homework, uniform, discipline) Studying at university, life as a student Studying abroad	**Visual**: use of pictures/videos and PowerPoint, film Le péril jeune **Auditory**: Listening exercises in textbook, assessment, film Le péril jeune **Read/Write:** basic and extended exercises in textbook **Kinaesthetic**:Multimedia use; Magazine page news about Usain Bolt house; Finding your French twin town	End of unit test, four skills assessed, exam type questions, mixed of peer/self assessment, checked by teacher with feedback This chapter: focus on reading and listening
May/June Ja	**Topic Area 4 – Education and employment** **Subtopic: Jobs and unemployment** **Revision and examination**	Opportunities for employment How to find employment The causes and consequences of unemployment How to solve the problem of unemployment Internship & volunteering :A case study	Teaching & Learning Styles (VARK): **Visual**: use of pictures/videos and PowerPoint **Auditory**: Listening exercises in textbook, assessment **Read/Write:** basic and extended exercises in textbook **Kinaesthetic**:Multimedia use	Punctual vocabulary/ grammar tests; peer assessed and checked by teacher. End of unit test, four skills assessed, exam type questions, mixed of peer/self assessment, checked by teacher with feedback This chapter: focus on reading and listening Exam papers practice End of year 1 examination-IAS Level

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