

ALMUÑÉCAR INTERNATIONAL SCHOOL



Year 12 Curriculum

2023-24

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LUCTOR ET EMERGO

ALMUÑECAR
INTERNATIONAL SCHOOL

Subject: ENGLISH LANGUAGE AS/2 LEVEL CIE 9093	Year group: 12	Teacher: Mark Burrow
No. of lessons per week: 5 CONSISTENT, REGULAR PEER AND SELF ASSESSMENT, FEEDBACK FROM TEACHER EVERY LESSON	Date: 2023-24	

Time scale (approximate)	Topics	Curriculum concepts/ skills and competencies	Learning styles	Assessment Criteria; tests/ projects etc.
Approx. 2 or 3 chapters per month	<p>Unit 1: Introduction to AS and A Level course</p> <p>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.</p>	<p>Context</p> <p>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.</p> <p>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 to Writing.</p>	<p>Visual: Looking at the structure of written language for different purposes-</p> <p>Read/Write: Exercises from Cambridge A Level student book- chapter 1-2</p> <p>Kinaesthetic: speeches, presentations, group work, role play scenarios</p>	<p>There is no coursework for English LANGUAGE</p> <p>REGULAR PAST PAPERS THROUGHOUT THE YEAR</p> <p>ANALYSIS OF DIFFERENT FORMS OF WRITING</p> <p>PRESENTATIONS</p>

September	<p>Unit 2: Commentary</p> <p>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.</p>	<p>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.</p> <p>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.</p>	<p>Visual: Looking at the structure of written language for different purposes-</p> <p>Read/Write: Exercises from Cambridge A Level student book- chapter 3-4</p> <p>Kinaesthetic: speeches, presentations, group work, role play scenarios</p>	<p>Mixed exercises with exam type questions. December: Mock exams (A' Level past papers)</p>
October	<p>Unit 3: Directed writing</p> <p>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.</p>	<p>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.</p> <p>Outline This unit deals with how to write for a specific purpose and/or audience, using appropriate vocabulary, tone, and style.</p>	<p>Visual: Looking at the structure of written language for different purposes-</p> <p>Read/Write: Exercises from Cambridge A Level student book- chapter 5-6</p> <p>Kinaesthetic: speeches, presentations, group work, role play scenarios</p>	<p>Mixed exercises (for each chapter) with exam type questions.</p>

November	<p>Unit 4: Imaginative writing (narrative/descriptive)</p> <p>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.</p>	<p>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.</p> <p>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.</p>	<p>Visual: Looking at the structure of written language for different purposes-</p> <p>Read/Write: Exercises from Cambridge A Level student book- chapter 7-8</p> <p>Kinaesthetic: speeches, presentations, group work, role play scenarios</p>	Presentations of how to answer exams questions, peer assessment, direct questioning
December	<p>Unit 5: Writing for an audience (discursive/argumentative)</p> <p>Recommended prior knowledge 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.</p>	<p>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.</p> <p>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.</p>	<p>Visual: Looking at the structure of written language for different purposes-</p> <p>Read/Write: Exercises from Cambridge A Level student book- chapter 9-10</p> <p>Kinaesthetic: speeches, presentations, group work, role play scenarios</p>	Assignments Language Analysis & Written work for purpose

January	<p>Unit 6: Text analysis</p> <p>Recommended prior knowledge Experience of a wide range of text types at AS Level and proficient command of written English.</p>	<p>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.</p> <p>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.</p>	<p>Visual: Looking at the structure of written language for different purposes-</p> <p>Read/Write: Exercises from Cambridge A Level student book- chapter 11-12</p> <p>Kinaesthetic: speeches, presentations, group work, role play scenarios</p>	Analysis of particular short story writing
February	<p>Unit 7: Language topics</p> <p>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.</p>	<p>Context This unit develops interdependent skills of reading, analysis and research, with an increased emphasis on spoken language.</p> <p>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.</p>	<p>Visual: Looking at the structure of written language for different purposes-</p> <p>Read/Write: Exercises from Cambridge A Level student book- chapter 13-End</p> <p>Kinaesthetic: speeches, presentations, group work, role play scenarios</p>	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 Kinaesthetic: Peer Assessment in writing	
May	<u>PAST PAPERS</u>	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



(Secondary) 2023-24 Contents

Subject: Global Perspectives and research 9239 Cambridge	Year group: 12	Teacher: M.Galiana
No. of lessons per week: 5	Date: 2023-24	

Time scale (approximate)	Topics	Curriculum concepts/ skills and competencies	Learning styles	Assessment Criteria; tests/ projects etc.
			<p>Teaching & Learning Styles (VARK):</p> <p>Visual:</p> <p>Auditory:</p> <p>Read/Write:</p> <p>Kinaesthetic:</p>	
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 Migration and work Gender issues	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

	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
December January	Stage 3. The practical and personal considerations of research design Stage 4. Desk Research: identifying,	<ul style="list-style-type: none"> • maintain and use a research log in support of the research process • select and analyse 	Research on the internet Reading different information Presentations	Exercise books Individual research

	<p>searching and reviewing the literature Stage 5. Selecting your methods</p> <p>Deconstruction with reconstruction: organising sources and perspectives</p> <p>Cultural heritage Gender issues</p>	<p>appropriate concepts, arguments, perspectives and evidence from a range of source material</p> <ul style="list-style-type: none"> • 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 	<p>Posters Mind Mapping Debates</p> <p>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</p>	
January February	<p>Stage 6. Gathering Primary Data Stage 7. Analysing your data</p> <p>Deconstruction, reconstruction and reflection: planning the essay Communication: writing the essay</p> <p>Logic Fallacies</p>	<ul style="list-style-type: none"> • communicate clearly throughout the report using appropriate academic terms, referencing and citation techniques • provide an oral explanation and justification of your own report findings, choice and use of research methods and methodology. 	<p>Research on the internet Reading different information Presentations Posters Mind Mapping Debates</p>	<p>Exercise books Essay Project research</p>
February March	<p>Stage 8. Writing up your Cambridge Research Report</p> <p>Research ethics Plagiarism Submitting guide</p> <p>Digital life</p>	<ul style="list-style-type: none"> • evaluate specific research methods and methodology • evaluate and synthesise evidence to draw reasoned conclusions • evaluate and synthesise alternative perspectives and 	<p>Research on the internet Reading different information Presentations Posters Mind Mapping Debates</p>	<p>Exercise books Essay Project research</p>

	Hacking elections Algorithm bias Digital divide	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		
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 Demonstrate understanding of this issue on a global scale Make recommendations	Exercise books Essay Project research Exam
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	Past paper practice	Final exam

		conditions		
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Contents

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:	2023-24

Time scale (approx)	Topics	Curriculum concepts/ skills and competencies	Learning styles	Assessment Criteria; tests/ projects etc.
		<p>Year 12 students will follow Pure Mathematics 1 and Statistics and Mechanics 1 (see separate documents)</p> <p>In Year 13, they will follow Pure Mathematics 2 and complete Statistics and Mechanics 2.</p>	<p>Teaching & Learning Styles (VARK): Visual, Auditory, Read / Write, Kinaesthetic</p>	
Autumn Term: September / October	Algebraic Expressions Quadratic Functions	<p>Revise and practice 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.</p> <p>Solve quadratic equations using factorisation, quadratic formula and completing the square General form of quadratic function Plotting graphs and solving quadratics 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?</p>	<p>Visual: Recognising different types of graphs and their characteristics, effect of the discriminant etc. Use of graphing software and completing related activities.</p> <p>Auditory: Watching, listening to (and adding to) one another's descriptions of how to describe discriminant and what information it provides - group activity. Recommended videos - in and out of the classroom.</p>	<p>For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p>

	Equations and Inequalities Sketching and recognising graphs of functions	<p>Use and apply models that involve quadratic functions.</p> <p>Solving simultaneous equations by elimination and by substitution including one linear and one quadratic.</p> <p>Interpret algebraic solutions of equations graphically</p> <p>Solve linear and quadratic inequalities, interpret inequalities graphically. Express solutions using set notation - correct use of AND and OR.</p> <p>Sketch Cubic graphs, reciprocals and Quartic graphs</p> <p>Use Intersections of graphs to solve equations</p> <p>Transformations of graphs, $f(x)$ notation.</p>	<p>Read/Write: Exercises from Pure 1 textbook chapters 1-4. Google classroom for homework and classroom activities, providing resources.</p> <p>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</p>	
Autumn Term November/December	Straight line graphs Circles Algebraic Methods	<p>Finding and using equations of straight lines and be able to use straight line models in a variety of contexts.</p> <p>Finding midpoints of lines</p> <p>Working with gradients - parallel and perpendicular.</p> <p>Finding equations of perpendicular bisectors</p> <p>Distance between points</p> <p>Finding points of intersection.</p> <p>Length and area problems.</p> <p>Circles - equation of a circle, geometric problems on a grid.</p> <p>Finding centre and radius, eqtn of tangent to a circle</p> <p>Problem solving with circles- do lines meet the circle etc.</p> <p>Problem solving with circles, lines and triangles.</p> <p>Cancel factors in algebraic fractions</p> <p>Divide a polynomial by a linear expression</p>	<p>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.</p> <p>Auditory: Whole class and group discussions.</p> <p>Read/Write: Exercises from Pure 1 textbook chapters 5-8. Google classroom for homework and classroom activities, providing resources.</p>	<p>For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p> <p>Test on ch 1-4</p>

	The Binomial Expansion	<p>Use the factor theorem to factorise a cubic expression Construct Mathematical proofs using algebra Use proof by exhaustion and disproof by counterexample</p> <p>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</p>	Kinaesthetic: further understanding of what constitutes a proof.	
Spring Term January/February	The Binomial Expansion (complete) Trigonometric Ratios Trigonometric identities and Equations Vectors in 2D	<p>Find individual coefficients and make approximations using the binomial expansion</p> <p>Use cosine rule to find a missing side or angle Use the sine rule to find a missing side or angle Find the area of a triangle Problem solve with triangles Sketch the graphs of sine, cosine and tangent Sketch simple transformations</p> <p>Calculate sine, cos and tan of any angle and know exact ratios for key angles Know and use $\tan\theta = \sin\theta/\cos\theta$ and $\sin^2 + \cos^2 = 1$ Solve trigonometric equations: $\sin \theta = k$, $\sin n\theta = k$, $\sin(\theta+a) = k$ Also for cos and tan Solve trig eqtns that produce quadratics</p> <p>Definitions, magnitude and direction, addition and scalar multiplication. Position vectors, vectors between two points, geometric problems.</p>	<p>Visual: Whiteboard demonstration of differentiation "in action". Use of Chromebooks - online question and answer activities. Whole class discussions and demonstrations. Videos to support the topic and strengthen understanding.</p> <p>Auditory: Constructive criticism of each other's solutions, participation in whole class and group discussions and activities.</p> <p>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.</p>	<p>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.</p> <p>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.</p>

		Use vectors to solve problems.	Kinaesthetic: Investigate the trig ratios - further understanding of what constitutes a proof.	
Spring term: March/April	Differentiation	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.	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.
	Integration	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	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 Pure 1 textbook chapters 12-14. Google classroom for homework and classroom activities, providing resources. Use of revision notes, examples and sample solutions.	Test on chapters 12 & 13 Revision exercises, practice papers and mock exams set for Pure 1
	Exponentials and Logarithms	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	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	
	Then - Exam Past Paper practice - preparation for May exams.	Past papers and revision materials provided - in class and for homework.		

			still not as strong as they should be.	
Summer Term: June	After exams start Year 13 Pure 2 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 denominator into partial fractions Convert an expression with <u>repeated</u> linear factors in the denominator into partial fractions Divide algebraic expressions (Algebraic- Long division) Convert an improper fraction into partial fraction form	Visual: Using graphing software to practice and revise properties of inverse functions - the effect on 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	Revision exercises and practice papers set for AS Mathematics. 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.



Contents

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: 2023-24	

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 Measures of location and spread	<p>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 understanding that different samples can lead to different conclusions about the population.</p> <p>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:</p>	<p>Visual: Mini Whiteboards to show inferences</p> <p>Auditory: Watching, listening to (and adding to) one another's descriptions of how to describe the different types of sampling</p> <p>Read/Write: Notes and exercises on sampling Google classroom- homework activities</p>	<p>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.</p>

		<p>variance, standard deviation, range and interpercentile ranges. Use of linear interpolation to calculate percentiles from grouped data is expected.</p> <p>Be able to calculate standard deviation, including from summary statistics.</p>		
Autumn Term November/ December	Representations of data	<p>Interpret diagrams for single-variable data, including understanding that area in a histogram represents frequency.</p> <p>Students should be familiar with histograms, frequency polygons, box and whisker plots (including outliers) and cumulative frequency diagrams.</p> <p>Connect to probability distributions. Recognise and interpret possible outliers in data sets and statistical diagrams.</p> <p>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</p> <p>Be able to clean data, including dealing with missing data, errors and outliers. For example, students may be asked to identify possible outliers on a box plot or scatter diagram.</p>	<p>Visual: Short video clips on variety of data presentations Studying different diagrams and interpreting as a class</p> <p>Read/Write: Notes and exercises on data presentation and interpretation Google classroom: homework activities</p> <p>Kinaesthetic: Use of calculators and graphing software</p>	<p>Mixed exercise with exam type questions is done for each chapter. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p>
	Correlation	<p>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).</p> <p>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.</p>		

		Understand that correlation does not imply causation. (No calculations or appreciation of values of correlation are required).		
Spring Term January/ February	Probability Statistical Distributions	<p>Understand and use mutually exclusive and independent events when calculating probabilities.</p> <p>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.</p> <p>Link to discrete and continuous distributions.</p> <p>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.</p>	<p>Visual: Studying correlation graphs and discussing possible data sets</p> <p>Read/Write: Notes and exercises on correlation, central tendency. Google classroom: homework activities</p> <p>Auditory: Constructive criticism of each other's solutions, participation in whole class and group discussions and activities.</p>	<p>For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p> <p>Revision exercises</p> <p>Test on Stats chapters so far</p>
Spring term: March/ April	Hypothesis testing	<p>Understand the language and concept of hypothesis testing</p> <p>Understand that a sample is used to make an inference about a population</p> <p>Find critical values of a binomial distribution using tables.</p> <p>Carry out a one tailed (and two tailed) test for the proportion of the binomial distribution and interpret the results</p>	<p>Visual: Use of data sets and graphs of these- matching</p> <p>Auditory: Collaborative work on answering exam questions - identifying where solutions have broken down, what needs to be included to gain maximum possible marks.</p> <p>Read/Write: Notes and exercises on standard deviation and outliers. Google</p>	<p>For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p>

			<p>classroom: homework activities</p> <p>Kinaesthetic: Use of calculators and graphing software</p>	
Summer Term: May/ June	<p>Revision</p> <p>Then (after exam) work on Pure for Year 13</p>	Past papers and revision materials provided - in class and for homework.	<p>Visual/ Kinesthetic: Continuation of work on puzzles and matching activities to assist where skills and knowledge are still not as strong as they should be.</p> <p>Auditory: Quizzes for each other based on work carried out this year</p> <p>Read/Write: Past exam questions/ past papers</p>	<p>Revision exercises and practice papers set for Stats</p> <p>For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p>

Contents

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: 2023-24	

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 answers with vectors in calculator	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
Autumn Term	Constant acceleration	Understand and interpret displacement-time graphs Understand and interpret velocity-time graphs	Visual: Short video clips on calculator usage	Mixed exercise with exam type questions is done for each

November/ December		<p>Derive the constant acceleration formulae and use them to solve problems</p> <p>Use the constant acceleration formulae to solve problems involving vertical motion under gravity</p>	<p>Studying different diagrams and interpreting as a class</p> <p>Read/Write: Exercises from Stats & Mechanics book ch9</p> <p>Kinaesthetic: Use of calculators and graphing software</p>	chapter and marked by teacher.
Spring Term January/ February	Forces and Motion	<p>Draw force diagrams and calculate resultant forces</p> <p>Understand and use Newton's first law</p> <p>Calculate resultant forces by adding vectors</p> <p>Understand and use Newton's second law, $F=ma$</p> <p>Apply Newton's second law to vector forces and acceleration</p> <p>Understand and use Newton's third law</p> <p>Solve problems involving connected particles</p>	<p>Visual: Studying triangles to illustrate vector components</p> <p>Read/Write: Exercises from Stats and Mechanics book ch10</p> <p>Auditory: Constructive criticism of each other's solutions, participation in whole class and group discussions and activities.</p>	<p>For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p> <p>Revision exercises</p> <p>Test on Mechanics chapters so far</p>
Spring term: March/ April	Variable acceleration	<p>Understand that displacement, velocity and acceleration may be given as functions of time</p> <p>Use differentiation to solve kinematics problems</p> <p>Use calculus to solve problems involving maxima and minima</p> <p>Use Integration to solve kinematics problems</p> <p>Use Calculus to derive constant acceleration formulae</p>	<p>Visual: Velocity/ time graphs- identify features</p> <p>Auditory: Collaborative work on answering exam questions - identifying where solutions have broken down, what needs to be included to gain maximum possible marks.</p>	<p>For each chapter, a mixed exercise with exam type questions is done. This is then marked by the teacher.</p> <p>All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.</p>

			Read/Write: Exercises from Stats and Mechanics book ch11 Kinaesthetic: Use of calculators and graphing software	
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 Kinaesthetic: Students set up different areas of room for different topics for revision	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. All exercises in books, for class work and homework are self-marked for answers and checked by the teacher to check layout and workings.

Contents

Subject: Biology	Year group: 12	Teacher: Ana Trout
No. of lessons per week: 5	Date: 2023-24	
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	<p>1.1 understand the importance of water as a solvent in transport, including its dipole nature</p> <p>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.</p> <p>1.4 know how monosaccharides (glucose, fructose and galactose) join together to form disaccharides (maltose, sucrose and lactose) and polysaccharides (glycogen, amylose and amylopectin) through condensation reactions forming glycosidic bonds, and how these can be split through hydrolysis reactions</p> <p>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</p> <p>1.6 understand why many animals have a heart and circulation (mass transport to</p>	<p>Teaching & Learning Styles (VARK): Visual, Auditory, Read / Write, Kinaesthetic</p> <p>1.3 CORE PRACTICAL 1 Use a semi-quantitative method with Benedict's reagent to estimate the concentrations of reducing sugars and with iodine solution to estimate the concentrations of starch, using colour standards.</p> <p>1.14 CORE PRACTICAL 2</p>	<p>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.</p> <p>Mathematical skills: There are opportunities for the development of mathematical skills in this unit, including tabulation and graphical treatment of data, concentrations and using</p>

	<p>overcome the limitations of diffusion in meeting the requirements of organisms)</p> <p>1.7 understand how the structures of blood vessels (capillaries, arteries and veins) relate to their functions</p> <p>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</p> <p>Details of myogenic stimulation are not needed at IAS</p> <p>1.9 (i) understand the role of haemoglobin in the transport of oxygen and carbon dioxide</p> <p>(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</p> <p>1.10 understand the course of events that leads to atherosclerosis (endothelial dysfunction, inflammatory response, plaque formation, raised blood pressure)</p> <p>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)</p> <p>1.12 know how factors such as genetics, diet, age, gender, high blood pressure, smoking and inactivity increase the risk of cardiovascular disease (CVD)</p> <p>1.13 understand the link between dietary antioxidants and the risk of cardiovascular disease (CVD)</p> <p>1.15 be able to analyse and interpret quantitative data on illness and mortality rates to</p>	<p>Investigate the vitamin C content of food and drink.</p>	<p>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.)</p>
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	<p>determine health risks, including distinguishing between correlation and causation and recognising conflicting evidence</p> <p>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</p> <p>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</p> <p>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)</p> <p>(ii) know the evidence for a causal relationship between blood cholesterol levels (total cholesterol and LDL cholesterol) and cardiovascular disease (CVD)</p> <p>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</p> <p>1.20 know the benefits and risks of treatments for cardiovascular disease</p>		
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Nov - Dec	Topic 2 - Membranes, Proteins, DNA and Gene Expression	<p>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)</p> <p>(ii) understand how the rate of diffusion is dependent on these properties and can be calculated using Fick's Law of Diffusion</p> <p>(iii) understand how the structure of the mammalian lung is adapted for rapid gaseous exchange</p>	<p>2.3 CORE PRACTICAL 3 Investigate membrane properties including the effect of alcohol and temperature on membrane permeability.</p>	
		<p>2.2 (i) know the structure and properties of cell membranes</p> <p>(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</p>	<p>RECOMMENDED ADDITIONAL PRACTICAL Investigate tissue water potentials using plant tissue and graded concentrations of a solute.</p>	

	<p>linked by condensation reactions to form peptide bonds)</p> <p>(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)</p> <p>(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)</p> <p>2.7 (i) understand the mechanism of action and the specificity of enzymes in terms of their three-dimensional structure</p> <p>(ii) understand that enzymes are biological catalysts that reduce activation energy</p> <p>(iii) know that there are intracellular enzymes catalysing reactions inside cells and extracellular enzymes catalysing reactions outside cells</p> <p>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 mononucleotides linked by condensation reactions to form phosphodiester bonds)</p> <p>(ii) know how complementary base pairing and the hydrogen bonding between two complementary strands are involved in the formation of the DNA double helix</p> <p>2.10 (i) understand the process of DNA replication, including the role of DNA polymerase</p>	<p>Investigate the effect of temperature, pH, enzyme concentration and substrate concentration on the initial rate of enzyme-catalysed reactions.</p>	
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	<p>(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</p> <p>2.11 understand the nature of the genetic code (triplet code, non-overlapping and degenerate)</p> <p>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</p> <p>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</p> <p>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</p> <p>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 pedigree diagrams, in the context of monohybrid inheritance</p>		
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	<p>(iii) understand sex linkage on the X chromosome, including red-green colour blindness in humans</p> <p>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</p> <p>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</p> <p>2.18 be able to identify and discuss the ethical and social issues relating to genetic screening from a range of ethical viewpoints, including religious, moral and social implications</p>		
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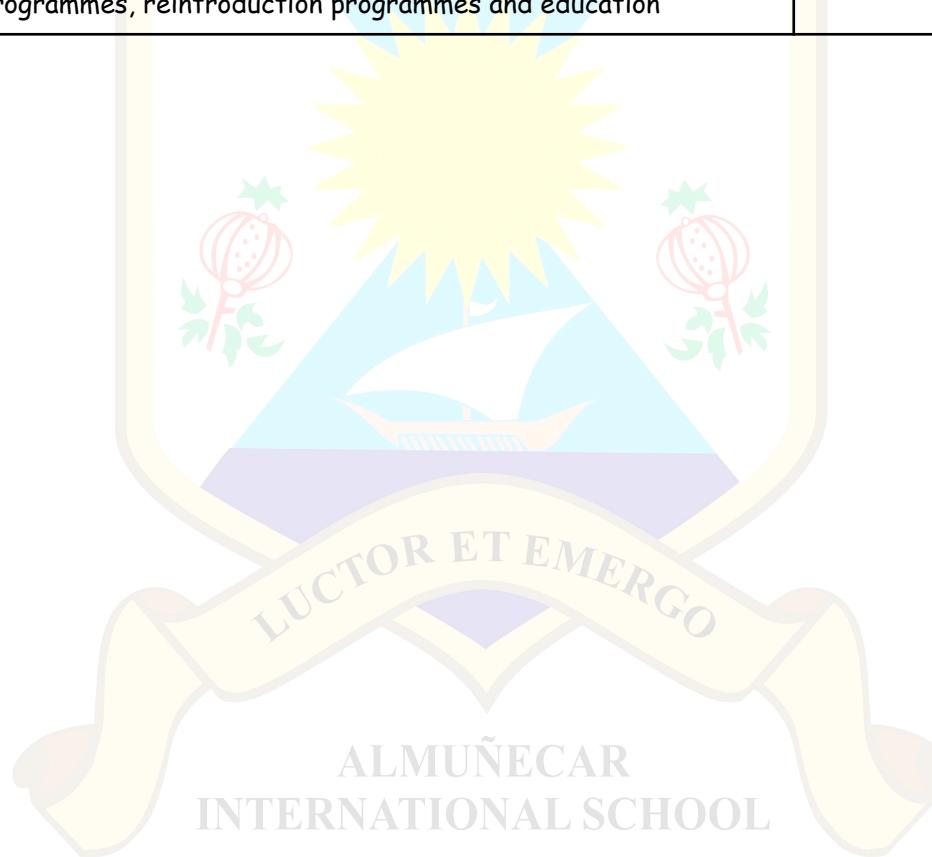
Jan - Feb	Topic 3 - Cell Structure, Reproduction and Development	<p>3.1 know that all living organisms are made of cells, sharing some common features</p> <p>3.2 understand how the cells of multicellular organisms are organised into tissues, tissues into organs, and organs into organ systems</p> <p>3.3 (i) know the ultrastructure of eukaryotic cells, including nucleus, nucleolus, ribosomes, rough and smooth endoplasmic reticulum, mitochondria, centrioles, lysosomes and Golgi apparatus</p> <p>(ii) understand the function of the organelles listed in (i)</p> <p>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</p> <p>3.5 (i) know the ultrastructure of prokaryotic cells, including cell wall, capsule, plasmid, flagellum, pili, ribosomes and circular DNA</p> <p>(ii) understand the function of the structures listed in (i)</p> <p>3.6 be able to recognise the organelles in 3.3 from electron microscope (EM) images</p> <p>3.7 (i) know how magnification and resolution can be achieved using light and electron microscopy</p> <p>(ii) understand the importance of staining specimens in microscopy</p> <p>3.9 (i) know that a locus is the location of genes on a chromosome</p> <p>(ii) understand the linkage of genes on a chromosome</p> <p>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</p> <p>Names of the stages of prophase are not required.</p>	<p>3.8 CORE PRACTICAL 5</p> <p>(i) use a light microscope to make observations and labelled drawings of suitable animal cells</p> <p>(ii) use a graticule with a microscope to make measurements and understand the concept of scale</p> <p>RECOMMENDED ADDITIONAL PRACTICAL</p> <p>Investigate factors affecting the growth of pollen tubes.</p> <p>3.15 CORE PRACTICAL 6</p> <p>Prepare and stain a root tip squash to observe the stages of mitosis.</p>	<p>Practical skills:</p> <p>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.</p> <p>Mathematical skills:</p> <p>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 magnification, understanding the terms mean, mode and median, constructing and interpreting frequency tables, bar charts and histograms. (Please see Appendix 6: Mathematical skills and</p>
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	<p>3.11 understand how mammalian gametes are specialised for their functions (including the acrosome in sperm and the zona pellucida in the egg cell)</p> <p>3.12 know the process of fertilisation in mammals, including the acrosome reaction, the cortical reaction and the fusion of nuclei</p> <p>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</p> <p>3.14 understand the role of mitosis and the cell cycle in producing genetically identical daughter cells for growth and asexual reproduction</p> <p>3.16 be able to calculate mitotic indices</p> <p>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</p> <p>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</p> <p>3.19 understand how one gene can give rise to more than one protein through post-transcriptional changes to messenger RNA (mRNA)</p> <p>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</p> <p>3.21 understand how some phenotypes are affected by multiple alleles for the same</p>		exemplifications for further information.)
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		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	<p>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)</p> <p>4.2 be able to recognise the organelles in 4.1 from electron microscope (EM) images</p> <p>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</p> <p>4.4 understand how the arrangement of cellulose microfibrils and secondary thickening in plant cell walls contributes to the physical properties of xylem vessels and sclerenchyma fibres in plant fibres that can be exploited by humans</p> <p>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)</p> <p>4.7 understand how the uses of plant fibres and starch may contribute to sustainability, including plant-based products to replace oil-based plastics</p> <p>4.8 understand the importance of water and inorganic ions (nitrate, calcium ions and magnesium ions) to plants</p> <p>4.10 understand the conditions required for bacterial growth</p>	<p>4.6 CORE PRACTICAL 7</p> <p>Use a light microscope to:</p> <p>(i) make observations, draw and label plan diagrams of transverse sections of roots, stems and leaves</p> <p>(ii) make observations, draw and label cells of plant tissues</p> <p>(iii) identify sclerenchyma fibres, phloem, sieve tubes and xylem vessels and their location.</p> <p>RECOMMENDED ADDITIONAL PRACTICAL</p> <p>Investigate plant mineral deficiencies.</p> <p>4.9 CORE PRACTICAL 8</p> <p>Determine the tensile strength of plant fibres.</p>	

	<p>4.11 know that substances derived from plants can have antimicrobial and other therapeutic properties</p> <p>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</p> <p>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 (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)</p> <p>4.15 know that, over time, the variety of life has become extensive but is now being threatened by human activity</p> <p>4.16 understand what is meant by the terms biodiversity and endemism</p> <p>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</p> <p>4.18 understand how biodiversity can be compared in different habitats using the formula to calculate an index of diversity (D):</p> <p>4.19 understand the concept of niche and be able to discuss examples of adaptations of organisms to their environment (behavioural, anatomical and physiological)</p> <p>4.20 (i) understand how the Hardy-Weinberg equation can be used to see whether a</p>	<p>4.12 CORE PRACTICAL 9</p> <p>Investigate the antimicrobial properties of plants, including aseptic techniques for the safe handling of bacteria.</p>	
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		<p>change in allele frequency is occurring in a population over time</p> <p>(ii) understand that changes in allele frequency can come about as a result of mutation and natural selection</p> <p>(iii) understand that reproductive isolation can lead to accumulation of different genetic information in populations, potentially leading to the formation of new species</p> <p>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</p>		
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Contents

Subject: Chemistry <u>Specification - A level (pearson.com)</u>	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	<p>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.</p> <p>Pupils will also learn to calculate the relative atomic mass of an element given the relative abundances of its isotopes, or its mass spectrum.</p>	<p>Visual/Auditory: Pupils must take notes from verbal and written instructions regarding calculations.</p> <p>Read/write: Write and construct balanced equations and perform calculations using these.</p> <p>Kinaesthetic: Using molymods to build complex molecules and show isomers. Analysing mass spectra in terms of isotopic abundances.</p>	<p>Physical Unit Assessment</p> <p>Weekly homework for each topic</p> <p>Feedback from class activities</p>
	(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	<p>Physical Unit Assessment</p> <p>Weekly homework for each topic</p> <p>Feedback from class activities</p>

			Auditory: Pupils will be asked to teach each other about various electron orbitals.	
	(P) Chemical Bonding	Pupils will investigate the differences between ionic, covalent, metallic and intermolecular bonding and forces.	<p>Visual: Pupils should be able to use dot-cross diagrams to show how covalent bonding works.</p> <p>Auditory: Pupils will be able to present about the differences between types of bonding and take notes on others' work.</p> <p>Read/write: Pupils will be able to describe and explain the differences between types of bonds and predict how bonding impacts upon chemical properties.</p>	<p>Physical Unit Assessment</p> <p>Weekly homework for each topic</p> <p>Feedback from class activities</p>
	(P) States of Matter	<p>Pupils should be able to describe, in detail, the differences between the various states of matter.</p> <p>They must use relevant calculations and models to evidence their understanding, such as the general gas equation $pV = nRT$.</p>	<p>Visual: Pupils should be able to use diagrams to show how gases behave at different pressures/temperatures.</p> <p>Read/write: Describe in detail the process and impact of hydrogen bonding.</p> <p>Kinaesthetic: Use molymods to show how large molecules such as fullerene are formed.</p>	<p>Physical Unit Assessment</p> <p>Weekly homework for each topic</p> <p>Feedback from class activities</p>
	(P) Chemical Energies	<p>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.</p> <p>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.</p>	<p>Visual: Pupils will use online models to demonstrate the concepts of entropy and enthalpy and how these affect reactions.</p> <p>Read/write: Pupils will learn to use formulas to calculate enthalpy, entropy and Gibb's free energy through textbook work.</p>	<p>Physical Unit Assessment</p> <p>Weekly homework for each topic</p> <p>Feedback from class activities</p>

	(P) Electrochemistry	<p>Students must use the redox series to determine which ions will be liberated during electrolysis and calculate the mass of the substance liberated also.</p> <p>Students will also investigate the efficiency of various types of battery and be introduced to the concepts of standard cell potential and standard electrode potential.</p>	<p>Visual: Data processing and graph handling.</p> <p>Read/write: Pupils will describe the concepts of standard cell potential and standard redox potential.</p> <p>Kinaesthetic: Pupils will carry out experimental procedures involving electrolysis and will be required to process the data they collect.</p>	<p>Physical Unit Assessment Weekly homework for each topic Feedback from class activities</p>
	(P) Equilibria	<p>Students will be introduced to the Le Chatelier principle of equilibrium. They must use equilibrium constants to determine the reversibility of reactions.</p>	<p>Visual: Pupils will be given visual demonstrations of reversible reactions which involve colour change in order to demonstrate this phenomenon.</p> <p>Auditory: Pupils will be required to listen to videos and audio resources explaining Le Chatelier's principle.</p> <p>Read/write: Pupils will be able to describe and explain Le Chatelier's principle.</p> <p>Kinaesthetic: Pupils will conduct experiments using solutions in equilibria and will calculate the volume of chemical required to reverse the reactions given.</p>	<p>Physical Unit Assessment Weekly homework for each topic Feedback from class activities</p>
	(P) Reaction Kinetics	<p>Pupils will develop their knowledge relating to rate of reaction and the factors that affect it.</p> <p>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.</p>	<p>Visual: Pupils will be shown diagrams and videos demonstrating the use of catalysts in industrial reactions.</p> <p>Auditory: Pupils will present their previous knowledge on rate of reactions to the class and must listen to test their own knowledge.</p>	<p>Physical Unit Assessment Weekly homework for each topic Feedback from class activities</p>

	<p>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.</p>	<p>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.</p> <p>Kinaesthetic: Pupils will conduct rate of reaction experiments in order to later determine the rate using graphs.</p>	
	<p>Inorganic (I) The Periodic Table</p> <p>Pupils will investigate the trends in the periodic table in terms of factors such as atomic radius, melting point, reactivity and explain these trends.</p> <p>Pupils will also be taught to predict the properties of an elements based upon its group in the table.</p>	<p>Visual: Pupils will familiarise themselves with the periodic table, particularly period 3, as this will make their work easier.</p> <p>Auditory: Pupils will discuss differences in the periodic table and identify trends.</p> <p>Read/write: Pupils will be asked to read information relating to an element and predict which group it belongs to based upon this.</p>	<p>Inorganic Unit Assessment Weekly homework for each topic Feedback from class activities</p>
	<p>(I) Group 2</p> <p>Pupils will investigate Group 2 of the periodic table and the compounds which are formed with the elements belonging to this group.</p> <p>Pupils will also explain the use of calcium hydroxide and calcium carbonate in agriculture.</p>	<p>Visual: Pupils will familiarise themselves with group 2 of the periodic table.</p> <p>Read/write: Pupils will be able to describe in detail the use of calcium compounds in agriculture.</p>	<p>Inorganic Unit Assessment Weekly homework for each topic Feedback from class activities</p>
	<p>(I) Group 17</p> <p>Pupils will investigate the chemistry of the Group 17 elements and their compounds and comment on their key properties.</p> <p>They will also investigate real-world uses of the halogens.</p>	<p>Visual: Pupils will compare the colours and key properties of the halogens by working with them in the laboratory.</p> <p>Auditory: Pupils will each report on one use of the halogens to the rest of the class.</p>	<p>Inorganic Unit Assessment Weekly homework for each topic Feedback from class activities</p>

			Read/write: Pupils will submit a report given to them for homework comparing the elements of groups 2 and 17.	
	(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 its 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
	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.	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.	Visual: Pupils will draw diagrams showing the difference between key hydrocarbon compounds.	Organic Unit Assessment Weekly homework for each topic Feedback from class activities

		<p>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.</p>	<p>Read/write: Pupils must be able to describe terms such as electrophile, nucleophile and substitution and give examples relating to each.</p> <p>Kinaesthetic: Pupils will use molymods to reinforce the structural differences between the organic compounds.</p>	
	(O) Halogen Derivatives	<p>Pupils will refresh their knowledge regarding halogenoalkanes and halogenoarenes and their properties.</p> <p>They will also demonstrate how their chemical properties make them both useful in industry and harmful to the environment.</p>	<p>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.</p> <p>Read/write: Pupils will describe the properties of halogenoalkanes and halogenoarenes and explain why these properties are desirable for some industrial purposes.</p>	<p>Organic Unit Assessment Weekly homework for each topic Feedback from class activities</p>
	(O) Hydroxy Compounds	<p>Pupils investigate the chemical properties of alcohols and phenol and how these compounds react with other chemicals.</p>	<p>Read/write: Pupils must be able to describe the key properties and uses of alcohols and phenol.</p> <p>Kinaesthetic: Pupils will investigate how alcohol and phenol can be used to produce other useful chemicals in industry through procedure based investigation.</p>	<p>Organic Unit Assessment Weekly homework for each topic Feedback from class activities</p>
	(O) Carbonyl Compounds	<p>Pupils will focus on the production of aldehydes and ketones and how they can be detected through various chemical tests.</p>	<p>Read/write: Pupils will research the mechanism of nucleophilic addition and how carbonyl compounds react with hydrogen cyanide through this process.</p>	<p>Organic Unit Assessment Weekly homework for each topic Feedback from class activities</p>

			Kinaesthetic: Pupils will carry out laboratory tests to determine the presence of ketones and aldehydes in various solutions.	
	(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.	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.	Organic Unit Assessment Weekly homework for each topic Feedback from class activities Marked experimental tasks
May/ June	Examinations			

Contents

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: 2023-24	

Time scale (approximate)	Topics	Curriculum concepts/ skills and competencies	Learning styles	Assessment Criteria; tests/ projects etc
September/ October/ November	Topic 1: forces and Motion <ul style="list-style-type: none"> • Rectilinear motion • Momentum • Forces • Work, energy and power 	<p>Practical skills through experiments, measurements, rearranging mathematical formula, creating graphs</p> <p>Understanding key physics concepts : Conservation of momentum and energy, application of Newton's laws to systems of dynamic forces.</p> <p>Relationship between work and energy</p>	<p>Visual: Reading scales of different instruments</p> <p>Auditory: Listening theoretical explanation</p> <p>Read/Write: Reading exercises and describing experiments</p> <p>Kinaesthetic: Carrying out experiments in class.</p>	<p>Exercises from workbook chapters 1</p> <p>Homework and exercises in class marked by students and checked by the teacher.</p> <p>Experimental skills in class Worksheet.</p>
December/ January	Topic 2 : Materials <ul style="list-style-type: none"> • Fluids • Solid materials 	<p>Practical skills through experiments</p> <p>Understanding key physics concepts : Density of fluids and effect of viscosity. Understanding Stokes law, The properties of solids and the impact Elastic and plastic</p>	<p>Visual: Reading scales of different instruments</p> <p>Auditory: Listening theoretical explanation</p> <p>Read/Write: Reading exercises and describing experiments</p>	<p>Exercises from workbook chapter 2</p> <p>Homework and exercises in class marked by students and checked by the teacher.</p>

		deformation Calculating Young's modulus using stress and strain	Kinaesthetic:Carrying out experiments in class	Experimental skills in class Unit 1 exam revision papers
February / March	Topic 3 : Electric circuits <ul style="list-style-type: none"> • Charge and current • Potential difference, emf and power • Resistivity and resistance • Internal resistance, series and parallel circuits and potential dividers 	<p>Experiments with circuits, measurements, handling of errors</p> <p>Understanding key physics concepts : Understanding current as the flow of charge</p> <p>Comparing electric potential and gravitational potential</p> <p>Applying Ohm's law and Kirchhoff's laws to analyse electric circuits with different types of electrical component</p>	<p>Visual: Reading scales of different instruments</p> <p>Auditory: Listening theoretical explanation</p> <p>Read/Write: Reading exercises and describing experiments</p> <p>Kinaesthetic:Carrying out experiments in class,</p>	<p>Exercises from workbook chapter 3</p> <p>Homework and exercises in class marked by students and checked by the teacher.</p> <p>Experimental skills in class Worksheets.</p>
April	Topic 4 : Waves and particle behaviour of lights <ul style="list-style-type: none"> • Nature of waves • Transmission and reflection of waves • Superposition of waves • Particle nature of light 	<p>Experiments with waves and light</p> <p>Understanding key physics concepts : Describe waves and the elements involved</p> <p>Explain diffraction and reflections of waves</p> <p>Explain superposition of waves</p> <p>Compare properties waves and how light behaves and then contrast with particle nature of light</p>	<p>Visual: Reading scales of different instruments</p> <p>Auditory: Listening theoretical explanation</p> <p>Read/Write: Reading exercises and describing experiments</p> <p>Kinaesthetic:Carrying out experiments in class,</p>	<p>Exercises from workbook chapter 4</p> <p>Homework and exercises in class marked by students and checked by the teacher.</p> <p>Experimental skills in class Worksheet.</p> <p>Unit 2 exam revision and past papers</p>

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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[Contents](#)

Subject: Business Studies	Year 12	Teacher: Guilherme Reis
No. of lessons per week: 5	Date: 2023-24	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
oct	The Market Marketing objectives & strategies	Change in demand Change in supply Demand and supply interaction Price elasticity of demand Income elasticity of demand	Discussions Text book Research Exam practice	Exam style questions Short answer Extended answer

	Marketing mix	<p>Objectives Product life cycle Boston matrix Product portfolio Marketing mix B2B B2C Consumer behaviour</p>		
nov	<p>Marketing Mix Managing people</p>	<p>product/service design Promotion and branding Pricing strategies Distribution Approaches to staffing Recruitment & selection Training Organisational structure Motivational theorists</p>	<p>Discussions Text book Research Exam practice</p>	<p>Exam style questions Short answer Extended answer</p>
dec	Managing people	<p>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</p>	<p>Discussions Text book Research Exam practice</p>	<p>Exam style questions Short answer Extended answer</p>
jan	Planning a business and raising finance	<p>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</p>	<p>Discussions Text book Research Exam practice</p>	<p>Exam style questions Short answer Extended answer</p>

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

Contents

Subject: Sports Science A2 Pearson Edexcel 9PEO	Year 12/13 mixed class	Teacher: N Lavin
No. of lessons per week: 5	Date: 2023-24	

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	Opportunities 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.	Kinaesthetic - Produce flow charts and tables showing opportunities to develop in sporting pathways.	Presentations., mini texts, exam type questions on topic from past papers.
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	Kinaesthetic - Produce flow charts and tables showing opportunities to	Presentations., mini texts, exam type questions on topic from past papers.

		techniques. Begin notational analysis of key performance opportunities.	develop in sporting pathways.	
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 which 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 coursework completion	Completion of analysis of performance showing understanding of objective analysis using notational techniques, Write and/or video to include a personal development plan.	Visual	Produce written coursework findings, video interview can also be included.
June	Revision for final examination	Revision techniques to best prepare for the formal written papers.	All	Past paper results

Contents

Subject: Selectividad Pure Mathematics	Year 12	Teacher: Lidia Jiménez
No. of lessons per week: 3	Date: 2023-24	

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.
Trimestre de Otoño: Sept-Octubre	Tema Matrices 1:	<ol style="list-style-type: none"> 1. Conocer y utilizar eficazmente las matrices, sus operaciones y sus propiedades. 2. Conocer el significado de rango de una matriz y calcularlo mediante el método de Gauss. 3. Resolver problemas algebraicos mediante matrices y sus operaciones. 	V: Se realizarán esquemas muy gráficos que se colocarán en la pared de la clase, además de la utilización de la pizarra por parte tanto de profesora como alumnos. A: La profesora dará las explicaciones	<p>Se hará una evaluación inicial de los conceptos de estos primeros temas, que ya se vieron durante el curso anterior.</p> <p>Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.</p> <p>Se hará un examen de los temas 1 y 2. Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.</p>

Tema 2: Determinantes	1. Conocer los determinantes, su cálculo y su aplicación a la obtención del rango de una matriz. 2. Calcular la inversa de una matriz mediante determinantes. Aplicarlo a la resolución matricial de sistemas $n \times n$.	correspondientes al temario R/W: Se utilizarán tanto los libros de texto como cuadernos y la pizarra para el desarrollo de los ejercicios. K: Algunos temas son más dados a este tipo de aprendizaje que otros, realizando movimientos con las manos o gestos singulares para señalar los murales de la pared.	Se realizará un examen de los temas 1 al 4 Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.
Tema 3: Resolución de sistemas	1. Dominar los conceptos y la nomenclatura asociados a los sistemas de ecuaciones y sus soluciones (compatible, incompatible, determinados, indeterminados...), e interpretar geométricamente para 2 y 3 incógnitas. 2. Conocer y aplicar el método de Gauss para estudiar y resolver sistemas de ecuaciones lineales. 3. Conocer el teorema de Rouché y la regla de Cramer y utilizarlos para la discusión y resolución de sistemas de ecuaciones.		
Tema 4: Geometría en el espacio	1. Conocer los vectores del espacio tridimensional y sus operaciones, y utilizarlos para la resolución de problemas geométricos. 2. Aplicaciones de los vectores para obtener ecuaciones de la recta y del plano en sus distintas formas 3. Problemas de posiciones relativas de rectas y planos		Se realizará un examen de los temas 1 al 5 Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.
Tema 5: Producto escalar	1. Definición de producto escalar 2. Aplicaciones del producto escalar: perpendicularidad y ángulo entre vectores 3. Ángulos en el espacio 4. Proyecciones 5. Puntos simétricos 6. Distancias		
Trimestre de invierno: Nov- Dic	Tema 6: Productos vectorial y mixto	1. Producto vectorial de vectores: definición, interpretación geométrica y expresión analítica.	

	<p>2. Aplicaciones del producto vectorial: cálculo de bases ortogonales, cálculo del vector director de una recta, áreas de figuras planas en el espacio, distancia entre un punto y una recta....</p> <p>3. Producto mixto de vectores: definición, interpretación geométrica y expresión analítica.</p> <p>4. Aplicaciones del producto mixto: volumen de un paralelepípedo y de un tetraedro, distancia entre dos rectas que se cruzan,...</p>		
Tema 6: Problemas métricos	<p>1. Obtener el ángulo que forman dos rectas, una recta y un plano o dos planos.</p> <p>2. Hallar la distancia entre dos puntos, de un punto a una recta, de un punto a un plano o entre dos rectas que se cruzan.</p> <p>3. Hallar áreas y volúmenes utilizando el producto vectorial o el producto mixto de vectores.</p> <p>4. Resolver problemas métricos variados.</p> <p>5. Obtener analíticamente lugares geométricos.</p> <p>6. Conocer las ecuaciones de algunas superficies tridimensionales descritas como lugares geométricos (esferas, elipsoides, hiperboloides, paraboloides).</p>	<p>Se realizará un examen de los temas 1 al 7</p> <p>Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.</p>	
Tema 7: Límites de funciones. Continuidad	<p>1. Dominar el concepto de límite en sus distintas versiones, conociendo su interpretación gráfica y su enunciado preciso.</p> <p>2. Calcular límites de todo tipo.</p> <p>3. Conocer el concepto de continuidad en un punto y los distintos tipos de discontinuidades.</p> <p>4. Conocer el teorema de Bolzano y aplicarlo para probar la existencia de raíces de una función.</p>	<p>Se realizará un examen individual del tema 8 y después otro examen de los temas 1 al 8.</p> <p>Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.</p>	

Trimestre de Primavera: Enero-Febr	Tema 8: Derivadas. Técnicas de derivación	<p>1. Dominar los conceptos asociados a la derivada de una función: derivada en un punto, derivadas laterales, función derivada...</p> <p>2. Conocer las reglas de derivación y utilizarlas para hallar la función derivada de otra.</p>		<p>Se realizará un examen de derivadas y posteriormente otro de los temas 1 al 11.</p> <p>Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.</p>
	Tema 9: Aplicaciones de la derivada	<p>1. Hallar la ecuación de la recta tangente a una curva en uno de sus puntos.</p> <p>2. Conocer las propiedades que permiten estudiar crecimientos, decrecimientos, máximos y mínimos relativos, tipo de curvatura, etc., y saberlas aplicar en casos concretos.</p> <p>3. Dominar las estrategias necesarias para optimizar una función.</p> <p>4. Conocer la regla de L'Hôpital y aplicarla al cálculo de límites.</p> <p>5. Conocer los teoremas de Rolle y del valor medio y aplicarlos a casos concretos.</p>		
	Tema 10 Representación de funciones	<p>1. Conocer el papel que desempeñan las herramientas básicas del análisis (límites, derivadas...) en la representación de funciones y dominar la representación sistemática de funciones polinómicas, racionales, trigonométricas, con radicales, exponenciales, logarítmicas...</p>		
Trimestre de	Tema 11: Integrales indefinidas	<p>1. Conocer el concepto de primitiva de una función y obtener primitivas de las funciones elementales.</p>		

Primavera: Marzo- Abril		2. Dominar los métodos básicos para la obtención de primitivas de funciones: sustitución, por partes, racionales.		
	Tema 12: Integral definida. Aplicaciones	<ol style="list-style-type: none"> 1. Conocer el concepto, la terminología, las propiedades y la interpretación geométrica de la integral definida. 2. Comprender el teorema fundamental del cálculo y su importancia para relacionar el área bajo una curva con una primitiva de la función correspondiente. 3. Conocer y aplicar la regla de Barrow para el cálculo de áreas. 4. Conocer y aplicar la fórmula para hallar el volumen de un cuerpo de revolución. 5. Utilizar el cálculo integral para hallar áreas o volúmenes de figuras o cuerpos conocidos a partir de sus dimensiones, o bien para deducir las fórmulas correspondientes. 	<p>Se realizará un examen de integrales y posteriormente otro de los temas 1 al 13.</p> <p>Se realizarán ejercicios en clase y en casa del libro y de fichas que entregará la profesora.</p>	
Trimestre de verano Mayo- Junio	Repaso de todo el temario	Afianzar los conocimientos adquiridos y reforzar los que resultan más complicados.		<p>Se realizarán exámenes de selectividad de otros años.</p>



Subject: Selectividad Biología	Year 12	Teacher: José Antonio Garciolo García
No. of lessons per week:	Date:	2023-24

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	<p>1. Identificar los elementos químicos y los tipos de compuestos que componen los seres vivos como base para conocer cualquier función biológica.</p> <p>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 sillas estructurales o monómeros, y clasificar los distintos principios inmediatos.</p> <p>3. Relacionar las propiedades fisicoquímicas del agua con su importancia en la composición, la estructura y la fisiología de los organismos vivos.</p>	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.	<p>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.</p> <p>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.</p> <p>3.1. Identifica la estructura de la molécula de agua y sus propiedades físicas y químicas, en relación con sus funciones biológicas.</p> <p>3.2. Define el concepto de pH y explica la importancia y el funcionamiento de los sistemas tampón.</p> <p>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.</p>

	4. Reconocer la importancia de las sales minerales y su trascendencia en el equilibrio hidrosalino.		
Tema 2: Los glúcidos	<p>1. Identificar la naturaleza química de los glúcidos y clasificarlos en función de sus monómeros.</p> <p>2. Destacar la importancia biológica de los carbonos asimétricos y su consecuencia: la estereoisomería de los monosacáridos.</p> <p>3. Describir y explicar cómo se forma el enlace O-glucosídico y enumerar las funciones de los principales disacáridos.</p> <p>4. Formular y describir los oligosacáridos y los polisacáridos y compuestos mixtos (peptidoglucanos y glucoproteínas) más importantes, y explicar sus funciones biológicas.</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>1.1. Clasifica los glúcidos y nombra y formula los principales monosacáridos describiendo sus funciones biológicas.</p> <p>2.1. Define los distintos tipos de isomería que se presentan en los monosacáridos, formulando los enantiómeros y los epímeros de los diferentes monosacáridos, y halla las formas cíclicas (anómeros) de las pentosas y hexosas, relacionándolas con sus funciones; en especial, en la constitución de los polímeros.</p> <p>3.1. Distingue los diferentes tipos de enlace O-glucosídico, describiendo los disacáridos más importantes y sus principales funciones biológicas.</p> <p>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.</p>
Tema 3: Los lípidos	<p>1. Reconocer la heterogeneidad del grupo de compuestos considerados lípidos y clasificarlos.</p> <p>2. Reconocer, formular esquemáticamente y clasificar los ácidos grasos, y enunciar las características peculiares de alguno de sus derivados.</p> <p>3. Identificar la estructura molecular de una grasa neutra y de un lípido de membrana, y construir las fórmulas de</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>R/W: Se realizarán los ejercicios del libro así como otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para</p>	<p>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.</p> <p>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.</p> <p>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.</p>

		<p>triacilglicéridos y fosfolípidos a partir de sus componentes.</p> <p>4. Describir la estructura molecular de los terpenos y esteroideos, y enumerar los diferentes tipos y sus funciones biológicas.</p> <p>5. Comprender el comportamiento en medio acuoso de las moléculas de los lípidos y explicar sus propiedades para la constitución de las membranas.</p>	<p>las explicaciones como para la corrección de ejercicios.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>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.</p> <p>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.</p>
Nov-Dic	Tema 4: Proteínas y acción enzimática	<p>1. Describir la estructura de los aminoácidos, sus propiedades y su clasificación, así como la formación del enlace peptídico.</p> <p>2. Distinguir los tipos de estructura de las proteínas y comprender cómo la secuencia de aminoácidos contiene la información que condiciona su forma (conformación) y, por lo tanto, su función.</p> <p>3. Clasificar las proteínas por sus propiedades estructurales y relacionarlas con sus funciones biológicas.</p> <p>4. Describir el mecanismo de la catálisis y enunciar las características de la acción enzimática.</p> <p>5. Explicar la inhibición enzimática, clasificar sus tipos y comprender su relación con los mecanismos de regulación.</p> <p>6. Conocer la existencia de los cofactores o coenzimas en la actividad enzimática y relacionarlos con el concepto de vitamina.</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>1.1. Describe la fórmula general de los aminoácidos y sus propiedades, clasifica y explica la formación del enlace peptídico.</p> <p>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 conformación de una proteína, su estructura primaria y su función.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>

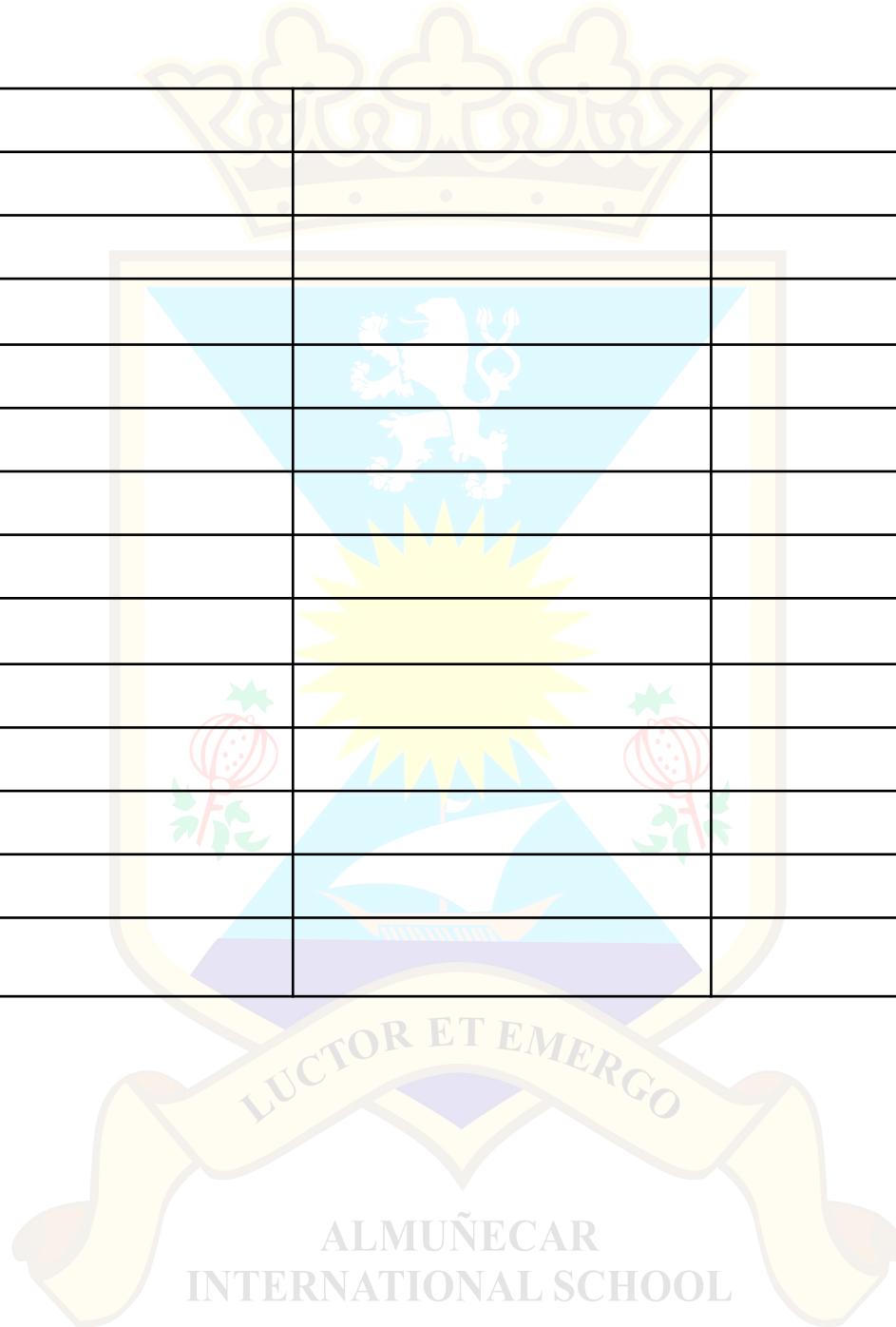
Tema 5: Nucleótidos y ácidos nucleicos	<p>1. Reconocer los nucleótidos como monómeros de los ácidos nucleicos e identificar sus componentes.</p> <p>2. Conocer los distintos tipos de nucleótidos y ácidos nucleicos, clasificarlos e identificar su estructura primaria.</p> <p>3. Describir la estructura secundaria de los ácidos nucleicos y reconocerlos como moléculas capaces de contener información.</p> <p>4. Comprender la trascendencia del modelo de estructura del ADN y sus repercusiones para la Biología.</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>1.1. Señala las distintas bases nitrogenadas indicando los nucleósidos y nucleótidos que forman, su clasificación y la formación del enlace N-glucosídico.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Tema 6: Teoría celular	<p>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.</p> <p>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.</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p>	<p>1.1. Explica el significado de la teoría celular y valora su importancia como teoría básica de la Biología, sus aportaciones 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.</p> <p>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.</p> <p>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-,</p>

		<p>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.</p>	<p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>identificando sus orgánulos y describiendo la función que desempeñen.</p>
Enero-Febre	Tema 7: Envolturas celulares	<p>1. Describir la estructura, la composición química y la función de la membrana plasmática.</p> <p>2. Explicar los distintos tipos de transporte a través de las membranas celulares.</p> <p>3. Comentar los tipos básicos de uniones intercelulares.</p> <p>4. Conocer la estructura, composición química y función de los diferentes tipos de paredes celulares.</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>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.</p> <p>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.</p> <p>3.1. Señala la forma y las características de los distintos tipos de uniones intercelulares.</p> <p>4.1. Detalla la estructura y la composición química de la pared celular de las plantas, de los hongos y de las bacterias</p>
	Tema 8: Orgánulos celulares I	<p>1. Desarrollar el concepto de hialoplasma y la naturaleza del citoesqueleto.</p> <p>2. Detallar la composición química y explicar la estructura y las misiones de los orgánulos y estructuras no membranosas de la célula.</p> <p>3. Enumrar y describir la estructura y función de cada una de las estructuras</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>R/W: Se realizarán los ejercicios del libro así como</p>	<p>1.1. Explica las características y misiones del hialoplasma, citando las funciones y los elementos componentes del citoesqueleto.</p> <p>2.1. Señala la composición química, la estructura y la función de los ribosomas, los centriolos, los cilios, los flagelos y las inclusiones.</p> <p>3.1. Describe el origen, la morfología y las funciones del retículo endoplasmático y del aparato de Golgi.</p>

		<p>y orgánulos que constituyen el sistema de endomembranas de la célula.</p>	<p>otros propuestos por la profesora. Además, se utilizará la pizarra, tanto para las explicaciones como para la corrección de ejercicios.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>3.2. Describe el origen, la morfología, los tipos y las funciones de los lisosomas, los peroxisomas y las vacuolas.</p>
Marzo-Abril	Tema 9: Orgánulos celulares II	<p>1. Conocer las características del núcleo.</p> <p>2. Conocer la morfología, los tipos, la estructura y la función de los cromosomas.</p> <p>3. Describir y analizar la estructura y función de las mitocondrias y cloroplastos.</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>1.1. Conoce el origen, la morfología, la composición química y la actividad metabólica del núcleo.</p> <p>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.</p> <p>1.3. Explica las características de la cromatina y describe la morfología, la composición química y la función del nucléolo.</p> <p>2.1. Conoce la naturaleza de los cromosomas, su estructura, su clasificación y la terminología relacionada con ellos.</p> <p>3.1. Describe las características, morfología, estructuras y componentes de las mitocondrias y señala su función metabólica.</p> <p>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.</p>
	Tema 10: Ciclo celular (Tema 12 del libro)	<p>1. Desarrollar el concepto de ciclo celular y describir sus fases.</p> <p>2. Definir mitosis, interpretar su función biológica y analizar sus fases.</p> <p>3. Definir meiosis, analizar su función biológica, sus diferencias con la mitosis,</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p>	<p>1.1. Define ciclo celular, describiendo las características generales de la interfase y los acontecimientos de cada una de sus fases.</p> <p>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</p>

		<p>su importancia genética, sus fases y la regulación del ciclo celular.</p>	<p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>citocinesis, detallando las diferencias que existen entre la citocinesis de células animales y la de las plantas.</p> <p>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, sobrecrezamiento, variabilidad genética y formación de los gametos.</p> <p>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.</p>
	Tema 11: Genética mendeliana (Tema 13 del libro)	<ol style="list-style-type: none"> Diferenciar los conceptos de herencia y genética. Explicar las leyes de Mendel. Resolver problemas de genética en los que se averigüe el genotipo a partir de cruzamientos con fenotipos conocidos. Explicar la teoría cromosómica de la herencia. Conocer las excepciones al modelo mendeliano. Señalar las características de la herencia ligada al sexo y la transmisión de caracteres ligados al sexo. 	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>1.1. Explica las diferencias entre genética y herencia, y define los términos relacionados con estos conceptos.</p> <p>2.1. Describe los experimentos de Mendel.</p> <p>2.2. Explica la terminología que permite trabajar la genética mendeliana.</p> <p>2.3. Enuncia las leyes de Mendel y las explicaciones que actualmente se dan a los resultados que obtuvo, y las relaciones de dominancia.</p> <p>3.1. Resuelve problemas de genética averiguando genotipos y aplicando el análisis estadístico a los resultados.</p> <p>4.1. Define en qué consiste la teoría cromosómica de la herencia.</p> <p>5.1. Define los conceptos de epistasis, alelismo múltiple, genes letales y herencia poligénica; aplicándolos a algunos ejemplos.</p> <p>5.2. Elabora esquemas de las distintas posibilidades de determinación del sexo.</p> <p>6.1. Resuelve problemas de herencia ligada al sexo en casos sencillos.</p>
Mayo-Junio	Tema 12: Sistema inmunitario (Tema 17 del libro)	<ol style="list-style-type: none"> Conocer la naturaleza de los mecanismos de defensa del organismo. Analizar la composición del sistema inmunitario. 	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p>	<p>1.1. Desarrolla el concepto de defensa orgánica los mecanismos de defensa tanto externos como internos.</p> <p>2.1. Describe las células del sistema inmunitario, las relaciones existentes entre ellas, las funciones de los macrófagos, los</p>

	<p>3. Explicar los conceptos de antígeno y de anticuerpo, sus características, estructura y forma de acción.</p> <p>4. Conocer los mecanismos defensivos inespecíficos.</p> <p>5. Conocer los mecanismos defensivos específicos.</p>	<p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>diferentes tipos de linfocitos y su participación en la respuesta inmunitaria.</p> <p>3.1. Expone los conceptos de antígeno y de anticuerpo describiendo sus características y modos de actuación.</p> <p>4.1. Explica el proceso de la reacción inflamatoria y el funcionamiento del sistema de complemento.</p> <p>5.1. Comprende cómo funcionan los mecanismos que conducen a la respuesta inmunitaria celular y a la humoral.</p>
Tema 13: Biotecnología (Tema 19 del libro)	<p>1. Conocer el concepto de biotecnología, las características de los procedimientos biotecnológicos tradicionales y de la nueva biotecnología y los ámbitos de trabajo principales de esta.</p> <p>2. Describir algunas técnicas utilizadas en ingeniería genética y su importancia en la evolución de la biotecnología.</p> <p>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.</p>	<p>V: Se verán presentaciones y videos sobre diversos aspectos del temario, así como mapas conceptuales.</p> <p>A: La profesora explicará en clase el tema haciendo interactuar a los alumnos.</p> <p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	<p>1.1. Define biotecnología, diferencia los procedimientos biotecnológicos tradicionales y la nueva biotecnología, y explica los principales campos de trabajo que esta abarca.</p> <p>2.1. Explica algunos procedimientos utilizados en ingeniería genética, reconociendo el avance que han supuesto en su desarrollo.</p> <p>3.1. Explica el uso que se da a la biotecnología en la minería y en la industria, especialmente en la industria alimentaria.</p> <p>3.2. Señala las principales aplicaciones de la biotecnología en la agricultura, la ganadería, la acuicultura y el medio ambiente.</p> <p>3.3. Reconoce los principales usos de la biotecnología, en especial de la ingeniería genética, en el campo de la medicina.</p>



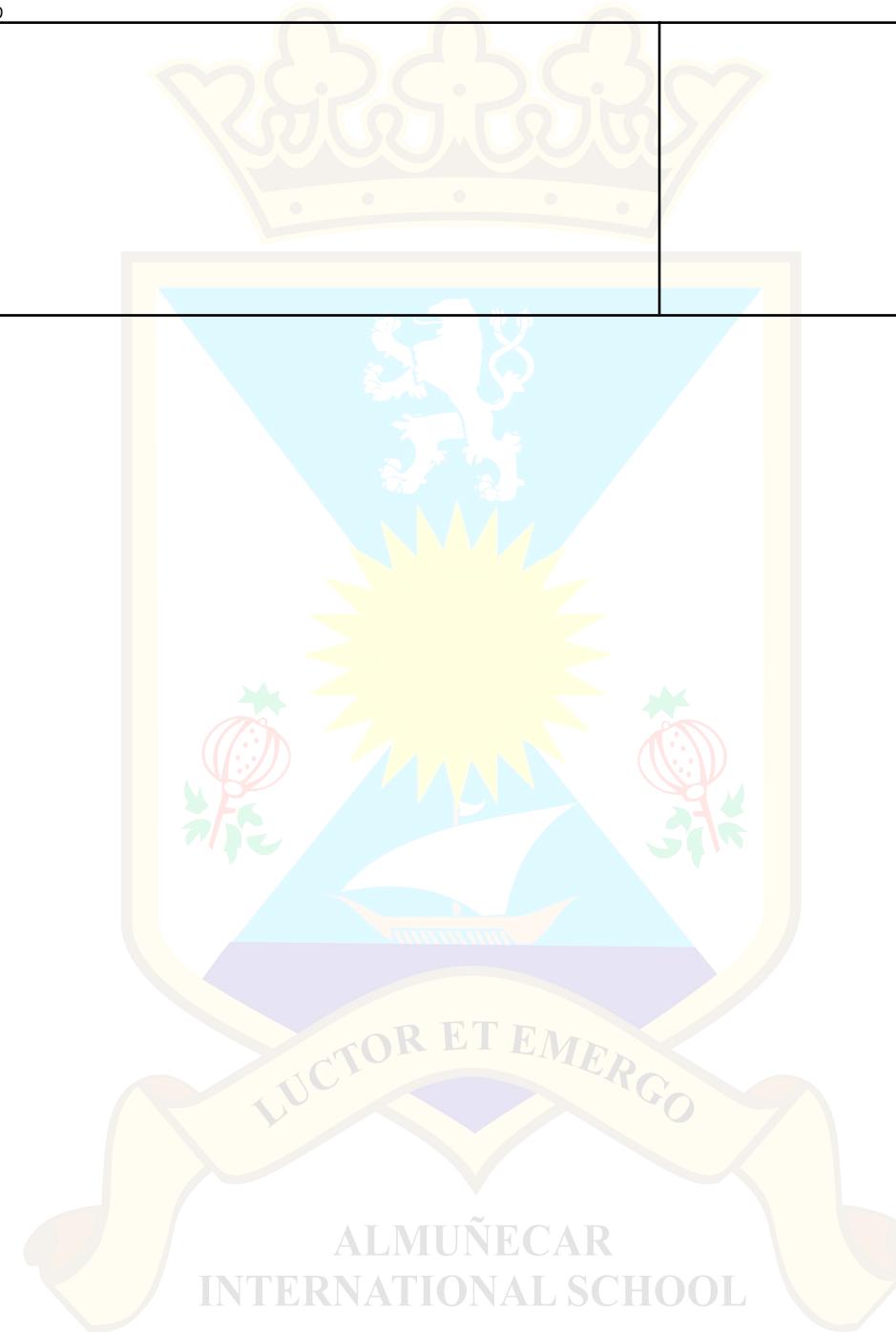
Subject: PCE Economía de Empresa	Year 13	Teacher: Lidia Jiménez
No. of lessons per week: 1	Date: 2023-24	

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	<ol style="list-style-type: none"> Conocer la naturaleza de la empresa, sus funciones en la economía y sus diferentes tipos. Conocer la función del empresario, su evolución y su papel en la empresa. Hacer una primera aproximación de conjunto a los diferentes elementos que componen la empresa. Aprender la naturaleza y la función de cada elemento y las áreas funcionales de 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 texto, realizando los ejercicios del mismo. Además, se realizarán textos escritos con definiciones y temas cortos, enfocados a las necesidades para selectividad. El	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 ejercicios del libro y otro material que entregará la profesora
	Tema 2:	1. Entender que la empresa se mueve en un entorno económico, social, cultural y político que influye sobre ella.		

	La empresa en su entorno	<ol style="list-style-type: none"> 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. 	<p>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.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	
	Tema 3: Las funciones de dirección I	<ol style="list-style-type: none"> 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		<p>V: Powerpoint sobre el temario. Se harán esquemas y mapas conceptuales que ayuden a organizar ideas en cada uno de los temas</p>	
	Tema 5: Los recursos humanos en la empresa			
Trimestre de Invierno: Ene-Febr	Tema 10: La función financiera en la empresa-financiación	<ol style="list-style-type: none"> 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. 	<p>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</p>	<p>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</p>

	Tema 11: La función financiera de la empresa- la inversión	<ol style="list-style-type: none"> 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. 	<p>finalizar alguno de los temas. También se organizarán debates y, al final, los alumnos se harán preguntas unos a otros.</p> <p>K: Se realizarán correcciones con gestos por parte de la profesora y relacionaremos gestos con algunos conceptos.</p>	
	Tema 12: La contabilidad de la empresa	<ol style="list-style-type: none"> 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 contables de la empresa	<ol style="list-style-type: none"> 1. Estudio sobre el estado contable de la empresa 2. Análisis financiero 3. Análisis de rentabilidades 4. Análisis patrimonial 		
Trimestre de Primavera: Marzo-Abril	Tema 14: La fiscalidad de la empresa	<ol style="list-style-type: none"> 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	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. 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.	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 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 1 al 12. Trabajo de casa y en clase Se mandan para casa los ejercicios del libro 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		



Year 12 Contents

Subject: Spanish A Level YSP01 <u>Specification</u>	Year group: 12	Teacher: Carmen Jiménez -M ^a Elena Con
No. of lessons per week: 2	Date: 2023-24	

Time scale (approximate)	Topics	Curriculum concepts/ skills and competencies	Teaching & Learning Styles (VARK):Visual:Auditory:Read/Write:Kinesthetic:	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
Summer Term	Unit 1-2-3 revision Unit 4 practice			External Exams Units1-2-3- 4

Subject: Spanish	Year 12	Teacher: M ^a Angeles Alvarez
No. of lessons per week: 4	Date:	2023-24

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 Grammar: gender of nouns, subjunctive, definite/indefinite articles. Skills: AS writing task Vocabulary: La salud	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

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

	Unit2: Understanding and written response		
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Subject: Spanish AS	Year group:12	Teacher: Mª Ángeles Álvarez
No. of lessons per week: 5 Approx. 3 Units per term	Date: 2023-24	

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 Grammar: gender of nouns, subjunctive, definite/indefinite articles. Skills: AS writing task	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	As above

January/ February	Topic Area 3 Environment and travel	Vocabulary: La salud 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	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: Unit1: Spoken expression and response Unit2: Understanding and written response			EXTERNAL EXAM: Unit 1 Spoken Expression and Response. Unit 2: Understanding and written response.

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
- 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

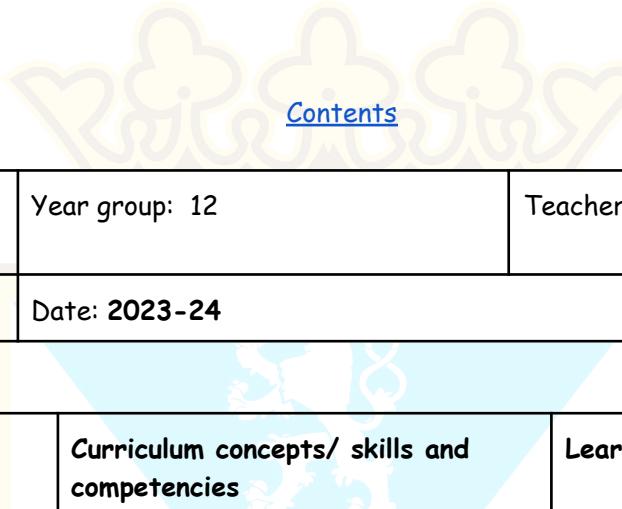
	<ul style="list-style-type: none">• Structuring a written response• Checking and correcting written work• Strategies for extending vocabulary• Revision of vocabulary• General revision techniques• Continued pronunciation and spelling practice• Specific practice of unit 1 stimulus card responses• Guiding their choice of General Topic Area according to their individual strengths and interests <p>The following Scheme of Work is based around:</p> <p>Edexcel Spanish for A Level, Hodder Education, 2008 - Student's Book</p> <p>Edexcel Spanish for A Level, Hodder Education, 2008 - Teacher's Resource Book</p> <p>Edexcel Spanish for A Level, Hodder Education, 2008 - Dynamic Learning Network Edition</p>		
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Contents

Subject: Media Studies 9097	Year 12	Teacher: Mark Burrow
No. of lessons per week: 5	Date: 2023-24	

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	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
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	V - prezis and slides presentations	Blog posts

		Sizing Layout Colour Photography	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	
February	Production	Using Serif PPhotoPlus 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 PPhotoPlus 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
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


 Contents

Subject: Global Perspectives & Research Cambridge 9239	Year group: 12	Teacher: M.Galiana
No. of lessons per week: 5	Date: 2023-24	

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	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
October November	AO1 AO2	Methodological skills comprise the	Research on the internet Reading different information	Exercise books Essay

	<p>AO3 Stage 1. Selecting your topic Component 2: essay Component 3: team project</p>	<p>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.</p>	<p>Presentations Posters Mind Mapping Debates</p>	<p>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.</p>
November December	<p>Stage 2. Developing your research question Component 2: essay Component 3: team project Component 4: Cambridge research report (outline proposal form)</p> <p>Introducing deconstruction: analysing and evaluating arguments and evidence</p>	<p>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.</p>	<p>Research on the internet Reading different information Presentations Posters Mind Mapping Debates</p>	<p>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</p>
December January	<p>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</p>	<ul style="list-style-type: none"> • 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 	<p>Research on the internet Reading different information Presentations Posters Mind Mapping Debates</p> <p>Collect detailed digital photographs Put together an exhibition or poster</p>	<p>Exercise books Individual research</p>

	<p>Deconstruction with reconstruction: organising sources and perspectives</p>	<p>credible evidence in support of arguments and overall perspectives</p> <ul style="list-style-type: none"> • analyse relevant perspectives, showing awareness of how the arguments, claims and the nature of the evidence are used to support conclusions 	<p>showing the different perspectives of how the worlds need for energy has to change together with written commentary</p>	
January February	<p>Stage 6. Gathering Primary Data</p> <p>Stage 7. Analysing your data</p> <p>Deconstruction, reconstruction and reflection: planning the essay</p> <p>Communication: writing the essay</p>	<ul style="list-style-type: none"> • communicate clearly throughout the report using appropriate academic terms, referencing and citation techniques • provide an oral explanation and justification of your own report findings, choice and use of research methods and methodology. 	<p>Research on the internet</p> <p>Reading different information</p> <p>Presentations</p> <p>Posters</p> <p>Mind Mapping</p> <p>Debates</p>	<p>Exercise books</p> <p>Essay</p> <p>Project research</p>
February March	<p>Stage 8. Writing up your Cambridge Research Report</p> <p>Research ethics</p> <p>Plagiarism</p> <p>Submitting guide</p>	<ul style="list-style-type: none"> • evaluate specific research methods and methodology • evaluate and synthesise evidence to draw reasoned conclusions • evaluate and synthesise alternative perspectives and interpretations in 	<p>Research on the internet</p> <p>Reading different information</p> <p>Presentations</p> <p>Posters</p> <p>Mind Mapping</p> <p>Debates</p>	<p>Exercise books</p> <p>Essay</p> <p>Project research</p>

		<p>order to make your own reasoned personal judgments</p> <ul style="list-style-type: none"> 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 		
March April	Stage 8. Writing up your Cambridge Research Report Reviewing Assessment Tracking progress Preparations for A Level exams	<p>Design own questions for research Plan and design own essay and response to this issue</p> <p>Combining different sources of information using statistics and tables</p>	<p>Research on the internet Reading different information Presentations Posters Mind Mapping Debates</p> <p>Contact other schools and organizations Demonstrate understanding of this issue on a global scale Make recommendations</p>	<p>Exercise books Essay Project research Exam</p>
April May	Preparations for A Level exams	<p>Collect information, ideas and arguments</p> <p>Question information, ideas and arguments</p> <p>Reflect on information, ideas, arguments and issues</p>	<p>Research on the internet Reading different information Presentations Posters Mind Mapping Debates</p>	<p>Exercise books Essay Project research</p>
June	Preparations for A Level exams	<p>Same competencies during September-April</p> <p>Writing past papers under exam</p>	Past paper practice	Final exam

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Contents

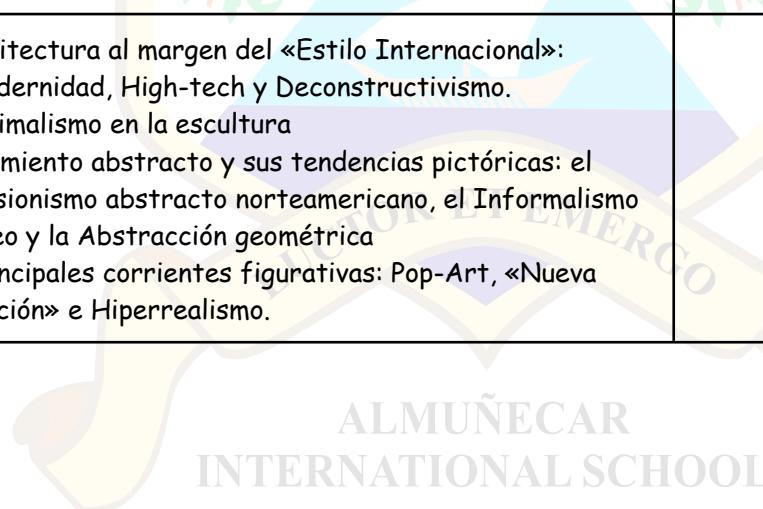
Subject: Historia del Arte	Year group: 12	Teacher: Manuel Galiana
No. of lessons per week: 3	Date: 2023-24	

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 <u>trabajo de investigación</u> basado en los contenidos propuestos (individual o de grupo), que posteriormente será expuesto en clase.
Septiembre	El arte: función, tipologías, técnicas y conservación.	<p>1. ¿Qué es el Arte?</p> <p>2. Función del Arte.</p> <p>3. La arquitectura</p> <p>4. La escultura</p> <p>5. La pintura</p> <p>6. Las artes menores</p> <p>7. ¿Cómo comentar una obra de arte?</p> <p>8. ¿Cómo interpretar una obra de arte?</p>		En cada una de las unidades didácticas 2-14 el alumnado realizará una serie de <u>tareas</u> basadas en los contenidos tratados.
Septiembre-Octubre	Arte griego	<p>1. Introducción. Los órdenes.</p> <p>2. El templo griego: el Partenón.</p> <p>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.</p> <p>4. El período helenístico.</p>	Partenón Templo de Niké Áptera Erecteion Discóbolo Diadúmeno Doríforo Hermes Apoxiómeno Victoria de Samotracia	Al final de cada unidad se realizará una <u>prueba objetiva</u> , del mismo formato que la prueba de

			Laocoonte y sus hijos	Selectividad. Para superar la materia, se realizarán en el trimestre varias pruebas escritas, no siendo ninguna de ellas eliminatorias.
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 Carrée Panteón Coliseo Augusto de Prima Porta Ara Pacis Marco Aurelio Columna Trajana Acueducto de Segovia Acueducto de Tarragona Arco de Cáparra	Si el alumno no supera la prueba escrita o la recuperaciones, con 5 puntos sobre 10, tendrá una nueva posibilidad en la evaluación extraordinaria.
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	
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	<p>1. Características generales de la arquitectura gótica.</p> <p>2. La ciudad: la catedral y los edificios civiles.</p> <p>3. La escultura: portadas y retablos.</p> <p>4. La pintura italiana del «Trecento»: Florencia y Siena.</p> <p>5. Los primitivos flamencos del siglo XV: los hermanos van Eyck.</p>	<p>Catedral de Chartres</p> <p>Catedral de León</p> <p>Catedral de Burgos</p> <p>Santa Capilla</p> <p>Virgen Blanca de Toledo</p> <p>Portada del Sarmental</p> <p>La Anunciación</p> <p>Lamento sobre Cristo muerto</p> <p>Adoración del cordero místico</p> <p>Virgen de los consejeros</p>	
Marzo	Arte Renacentista y Manierista.	<p>1. Introducción al Renacimiento.</p> <p>2. El «Quattrocento» italiano. Arquitectura: Brunelleschi y Alberti. Escultura: Donatello y Ghiberti. Pintura: Fra Angélico, Masaccio, Piero della Francesca y Botticelli.</p> <p>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.</p> <p>4. España. Arquitectura: del Plateresco al Escorial. Escultura: los primeros imagineros: Berruguete y Juni. Pintura: El Greco.</p>	<p>Santa María</p> <p>San Lorenzo</p> <p>Rucellai</p> <p>Puertas del baptisterio</p> <p>David</p> <p>Anunciación</p> <p>Nacimiento de Venus</p> <p>La primavera</p> <p>San Pietro in Montorio</p> <p>Villa Rotonda</p> <p>Virgen de las rocas</p> <p>Gioconda</p> <p>Escuela de Atenas</p> <p>Cúpula de San Pedro</p> <p>David</p> <p>Piedad</p> <p>Juicio final</p> <p>Lavatorio</p> <p>El jardín de las delicias</p> <p>El Escorial</p> <p>Santo Entierro</p>	

			Sacrificio de Isaac El entierro del conde de Orgaz	
Marzo - Abril	Arte Barroco	<p>1. La arquitectura en Italia y Francia. Las plantas alabeadas de Bernini y Borromini. El palacio clasicista francés: Versalles.</p> <p>2. Escultura en Italia: Bernini.</p> <p>3. Pintura en Italia. El naturalismo y los problemas de la luz: Caravaggio. El clasicismo en los frescos de los Carracci.</p> <p>4. La pintura en Flandes y en Holanda: Rubens y Rembrandt.</p> <p>5. La arquitectura barroca española. El urbanismo: la Plaza Mayor.</p> <p>6. La gran imaginería: Andalucía, Castilla y Murcia.</p> <p>7. La pintura barroca. El naturalismo tenebrista: Ribera y Zurbarán. Realismo barroco: Velázquez y Murillo.</p>	<p>San Carlos de la Cuatro Fuentes</p> <p>Plaza de San Pedro</p> <p>Apolo y Dafne</p> <p>Baldaquino</p> <p>Éxtasis de Santa Teresa</p> <p>Entierro de Cristo</p> <p>Conversión de San Pablo</p> <p>Muerte de la Virgen</p> <p>Las tres Gracias</p> <p>Lección de anatomía</p> <p>La ronda de noche</p> <p>Vista de Delft</p> <p>Obradoiro</p> <p>Piedad</p> <p>Inmaculada</p> <p>Joven mendigo</p> <p>Rendición de Breda</p> <p>Las hilanderas</p> <p>Las Meninas</p>	
Abril	Rococó y Neoclasicismo.	<p>1. Rococó: arquitectura, escultura y pintura.</p> <p>2. Características generales del Neoclasicismo. Las Academias.</p> <p>3. Arquitectura: Juan de Villanueva. Escultura: Canova. Pintura: David.</p>	<p>Museo del Prado</p> <p>Eros y Psique</p> <p>Paulina Bonaparte</p> <p>El juramento de los Horacios</p>	
Mayo	El Siglo XIX: El Arte de un Mundo en	<p>1. Francisco de Goya.</p> <p>2. Introducción. Romanticismo: Delacroix. Realismo: Courbet.</p> <p>3. Arquitectura. Historicismos. Edificios de hierro y cristal. El</p>	<p>Familia de Carlos IV</p> <p>Maja desnuda</p> <p>Saturno devorando a sus hijos</p>	

	Transformaci ón.	<p>Modernismo.</p> <p>4. Impresionismo: Monet, Renoir y Degas. Las esculturas de Rodin.</p> <p>5. Postimpresionismo: Cézanne, Gauguin y van Gogh.</p> 	<p>Fusilamientos del 3 de mayo</p> <p>Torre Eiffel</p> <p>Puertas del infierno</p> <p>El beso</p> <p>El pensador</p> <p>La libertad guiando al pueblo</p> <p>Impresión, amanecer</p> <p>Los jugadores de cartas</p> <p>Noche estrellada</p> <p>Casa Batlló</p> <p>La Pedrera</p>	
Mayo - Junio	La Ruptura de la Tradición: el Arte en la Primera Mitad del Siglo XX.	<p>1. Escultura: innovaciones en materiales y técnicas.</p> <p>2. La arquitectura del movimiento moderno. Racionalismo: Le Corbusier. Organicismo: Frank Lloyd Wright.</p> <p>3. La pintura. Las vanguardias históricas: Fauvismo, Cubismo, Expresionismo alemán, Dadaísmo y Surrealismo.</p> 	<p>Bauhaus</p> <p>Villa Savoye</p> <p>Casa de la cascada</p> <p>El profeta</p> <p>El grito</p> <p>Las señoritas de Avignon</p> <p>Guernica</p> <p>Fuente</p>	
Junio	La Universalizaci ón del Arte desde la Segunda Guerra Mitad del Siglo XX.	<p>1. La arquitectura al margen del «Estilo Internacional»: Posmodernidad, High-tech y Deconstructivismo.</p> <p>2. El Minimalismo en la escultura</p> <p>3. El movimiento abstracto y sus tendencias pictóricas: el Expresionismo abstracto norteamericano, el Informalismo europeo y la Abstracción geométrica</p> <p>4. Las principales corrientes figurativas: Pop-Art, «Nueva figuración» e Hiperrealismo.</p> 	Lata de sopa Campbell	

Contents

Subject: Fundamentos del Arte	Year group: 12	Teacher: Manuel Galiana
No. of lessons per week: 2		Date: 2023-24

Week	Topics/ Learning Objectives/	Activities	Resources	Assessment	Key vocabulary and key questions	Notes
1 - 2	Topics El Romanticismo: una expresión desaforada del sentimiento. Oposición al intelectualismo racionalista del siglo XVIII. Nacionalismo italiano y germánico. Orientalismo idílico. La actitud vital de Lord Byron L.Objectives -Reconocer las claves teóricas de la obra artística romántica. -Diferenciar el significado del término "romántico" aplicado al movimiento artístico del siglo XIX y el uso actual. -Relacionar el romanticismo artístico con el auge del nacionalismo.	-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 Presentación de trabajos (30%) Trabajos en grupo (20%) Exámenes (50 %)	-Luz -Color -Movimiento -Pincelada rápida -Técnica modernista -Impresionismo -Exótico -Orientalizante -Medievalista -Regionalismo -Pabellón Mudéjar -Regionalismo	-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.

3-4	<p>Topics</p> <ul style="list-style-type: none"> -La Evolución de la Arquitectura. -Los "Neos". -El Eclecticismo <p>L.Objectives</p> <ul style="list-style-type: none"> -Reconocer los elementos de estilos anteriores aplicados a edificios de la época: arquerías, columnas, decoración, etc 	<ul style="list-style-type: none"> -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" 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados <p>Marking</p> <ul style="list-style-type: none"> Presentación de trabajos (30%) Trabajos en grupo (20%) Exámenes (50 %) 	<ul style="list-style-type: none"> -Historicismo -Eclecticismo -Materiales -Parlamento Londres -Ópera París -Pabellón Real de Brighton -La Almudena Madrid -Simetría -Regularidad -Horizontalidad -Técnicas de construcción -Neogótico -Neomudéjar -Ligereza -Flexibilidad 	<ul style="list-style-type: none"> -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.
5-6	<p>Topics</p> <ul style="list-style-type: none"> -Las Exposiciones Universales -La Arquitectura del Hierro. 	<ul style="list-style-type: none"> -Introducción oral -Proyección digital -Lectura de contenidos pdf 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención 	<ul style="list-style-type: none"> -Crystal Palace, Paxton -Modernista -Torre Eiffel -Hierro 	<ul style="list-style-type: none"> -Atención a la diversidad (Dislexia): -Uso de textos adaptados

	<p>L.Objectives</p> <ul style="list-style-type: none"> -Relacionar las exposiciones universales de París, Londres, Barcelona y otras con la expansión de las nuevas corrientes arquitectónicas. 	<ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Realización de ejercicios escritos y exámenes</p> <p>Calidad de la presentación de los ejercicios</p> <p>Análisis y valoración de los ejercicios realizados</p> <p>Marking</p> <p>Presentación de trabajos (30%)</p> <p>Trabajos en grupo (20%)</p> <p>Exámenes (50 %)</p>	<ul style="list-style-type: none"> -Cascada -Monumental -Gaudí -Cristal -Ensamblaje -Ventilación Tendencia arquitectónica -Innovación Técnica -Exposición Universal 	<p>Tipografía adaptada:</p> <p>Font: Normal text, Verdana, size: 1.43</p> <p>Fichas tangibles de memoria visual</p> <p>Ejercicios de lecto-escritura insertados en extensiones.</p>
7 to 13	<p>Topics</p> <ul style="list-style-type: none"> -Pintura. El Romanticismo en Europa -La Pintura Romántica en Francia -Pintura en España: Goya. Costumbrismo rococó. Expresionismo. Caprichos. <p>L.Objectives</p> <ul style="list-style-type: none"> -Sopesar la importancia de la obra pictórica de Karl 	<ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados 	<ul style="list-style-type: none"> -Cartones -Costumbrismo -Humanismo -Tensión anatómica -Mamelucos -Grabado -Matriz -Plancha -Buril -Bruñidor -Punta seca -Rebabá -Aguafuerte 	<p>Atención a la diversidad (Dislexia):</p> <p>Uso de textos adaptados</p> <p>Tipografía adaptada:</p> <p>Font: Normal text, Verdana, size: 1.43</p> <p>Fichas tangibles de memoria visual</p>

	<p>Friedrich Schinkel, Caspar David Friedrich, Thomas Cole, John Constable, William Turner</p> <ul style="list-style-type: none"> - Analizar la pintura romántica francesa: Théodore Géricault y Eugène Delacroix, - Reconocer la obra pictórica de Goya. - Comentar las pinturas negras de Goya - Comparar la obra de Goya de características expresionistas con obras de contenido formal similar en otras épocas y culturas - Comentar el cuadro "La Balsa de la Medusa" de Géricault, valorando la base histórica y el resultado plástico. - Analizar la pintura "La Muerte de Sardanápolo" - Clasificar la temática de los cuadros de Goya - Relacionar el cuadro "La Familia de Carlos IV" con "Las Meninas" - Relacionar el cuadro "La Lechera de Burdeos" con la pintura impresionista posterior 	<ul style="list-style-type: none"> -Extensión "Para saber más" Video Viaje a la Luna -Extensión "Curiosidad" -Extensión "Comprueba lo aprendido" -Extensión "Importante" -Ficha "Reflexiona". -Resumen escrito fin de tema 	<ul style="list-style-type: none"> -Youtube -Drive -Fichas de memorización visual 	<p>Marking</p> <p>Presentación de trabajos (30%)</p> <p>Trabajos en grupo (20%)</p> <p>Exámenes (50 %)</p>	<ul style="list-style-type: none"> -Barniz -Aguatinta -Colofonia -Pompier -Burgués -Rafael -Crepuscular -Manchas de sombra -Tableautin -Academicista -Medievalismo 	<p>-Ejercicios de lecto-escritura insertados en extensiones.</p>
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14-15	Topics	-Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas	-Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones	Assessment Criteria	-Plástica -Tensión -Retrato de grupo -Libertad expresiva -Busto -Recíproco -Estilo Realista -Vigor -Abrupto -Anatomía -Tensión -Acto reflexivo -Esculpir -Retrato conceptual	-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.
	L.Objectives	-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".	-Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual	Marking	Presentación de trabajos (30%) Trabajos en grupo (20%) Exámenes (50 %)	
16-17-18	Topics	-Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas	-Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones	Assessment Criteria	-Luz -Color -Movimiento -Pincelada rápida -Técnica modernista -Impresionismo -Exótico	-Atención a la diversidad (Dislexia): -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43
	L.Objectives	-Proyección videos	-Chromebook -Speakers			

	<ul style="list-style-type: none"> -Identificar el género pictórico denominado "pintura orientalista" a partir de la obra pictórica de artistas europeos y españoles. Por ejemplo Mariano Fortuny. -Analizar la visión romántica de la historia y el auge del historicismo pictórico. 	<ul style="list-style-type: none"> -Análisis formal y estético -Ejercicio expresión oral de detección de influencias -Discusión y análisis de contextos -Extensión "Importante" -Ficha "Reflexiona". -Resumen escrito fin de tema 	<ul style="list-style-type: none"> -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Marking</p> <p>Calidad de la presentación de los ejercicios</p> <p>-Análisis y valoración de los ejercicios realizados</p> <p>Presentación de trabajos (30%)</p> <p>Trabajos en grupo (20%)</p> <p>Exámenes (50 %)</p>	<ul style="list-style-type: none"> -Orientalizante -Medievalista -Regionalismo -Pabellón Mudéjar -Regionalismo 	<ul style="list-style-type: none"> -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura insertados en extensiones.
19-20-21	<p>Topics</p> <ul style="list-style-type: none"> -Fotografía. El inicio: la técnica -Fotografía:el retrato y el paisaje -El cine: invento y primeros pasos. Cine mudo <p>L.Objectives</p> <ul style="list-style-type: none"> -Comentar las primeras fotografías en blanco y negro -Relacionar el retrato fotográfico y el retrato pictórico. 	<ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención estenopeica -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados <p>Marking resources</p>	<ul style="list-style-type: none"> -Daguerrotipo -Cámara oscura -Cámara estenopeica -Niepce -Calotipo -Colodión húmedo -Albúmina -Ambrotipo -Ferrotipo -Gelatino-bromuro -Nitrató -Kodak -Fotomontaje -Artisticidad -Academicista 	<ul style="list-style-type: none"> -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.

	<ul style="list-style-type: none"> -Describir el contexto en el que se enmarca el nacimiento del cine (los hermanos Lumière, Méliès, Segundo Chomón) así como el nacimiento del cine americano. 	<ul style="list-style-type: none"> -Extensión "Para saber más" Video Viaje a la Luna -Extensión "Curiosidad" -Extensión "Comprueba lo aprendido" -Extensión "Importante" -Ficha "Reflexiona". -Resumen escrito fin de tema 	<ul style="list-style-type: none"> -Fichas de memorización visual 	<ul style="list-style-type: none"> Presentación de trabajos (30%) Trabajos en grupo (20%) Exámenes (50 %) 		
22-23-24	<p>Topics</p> <ul style="list-style-type: none"> -La moda y el mobiliario en el Romanticismo. -Estilos Regency. Napoleón III <p>L.Objectives</p> <ul style="list-style-type: none"> -Reconocer la evolución en la moda femenina y masculina -Describir las claves estilísticas del mobiliario y objetos suntuarios: Estilos Regency. Napoleón III. Joyería. Relojes. Vestuario. -Analizar la técnica del dorado al mercurio, incidiendo en la toxicidad del proceso, relacionándolo con la 	<ul style="list-style-type: none"> -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 "Para saber más" Video Viaje a la Luna -Extensión "Curiosidad" -Extensión "Comprueba lo aprendido" 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados <p>Marking resources</p>	<ul style="list-style-type: none"> -Burguesía -Dandy -Corsé -Acampanado -Escote -Bucle -Miriñaque -Enaguas -Opulento -Caoba -Drum-table -Quartet-table -Salón de banquetes -Ornamentación -Incrustación -Palisandro -Diván -Crapaud -Tête-à-tête 	<ul style="list-style-type: none"> -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.

	<p>explotación del oro en la actualidad.</p> <p>-Debatir acerca de la simbología del oro en diferentes culturas.</p>	<ul style="list-style-type: none"> -Extensión "Importante" -Ficha "Reflexiona". -Actividad de lectura -Resumen escrito fin de tema 		Exámenes (50 %)		
25	<p>Topics</p> <p>-El Modernismo: una definición y modelos.</p> <p>-El Art Nouveau</p> <p>L.Objectives</p> <p>-Analizar las claves estilísticas del modernismo, que le diferencian claramente de los estilos anteriores y posteriores.</p>	<ul style="list-style-type: none"> -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": -Extensión "Reflexiona" 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados <p>Marking</p> <ul style="list-style-type: none"> Presentación de trabajos (30%) Trabajos en grupo (20%) Exámenes (50 %) 	<ul style="list-style-type: none"> -Modernismo -Art Nouveau -Jugendstil -Sezession, Liberty, -Modern Style -Arte por el Arte -Víctor Horta -Ornamentación -Canon artístico -Progresista -Muro cortina -Reformas urbanísticas -Suntuoso 	<ul style="list-style-type: none"> -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.
26-27-28	<p>Topics</p> <p>-Art Nouveau</p>	<ul style="list-style-type: none"> -Introducción oral -Proyección digital 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales 	<p>Assessment Criteria</p>	<ul style="list-style-type: none"> -Psicoanálisis -Multicultural -Pureza decorativa 	<ul style="list-style-type: none"> -Atención a la diversidad (Dislexia):

	<ul style="list-style-type: none"> -La Sezession vienesa -Liberty -Jugendstil -Modern Style <p>L.Objectives</p> <ul style="list-style-type: none"> - Explicar el modernismo en Europa: Art Nouveau, Liberty, Sezession, Jugendstil, Modern style 	<ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios -Análisis y valoración de los ejercicios realizados <p>Marking</p> <ul style="list-style-type: none"> Presentación de trabajos (30%) Trabajos en grupo (20%) Exámenes (50 %) 	<ul style="list-style-type: none"> -Protorracionalist -Gustav Klimt -Otto Wagner -Fachadas opulentas -Olbrich -Hoffmann -Adolf Loos -Floreale -Ciudades máquinas -Decoración floral -Mackintosh -Glasgow School of Art -Austeridad y simplificación -Composición armónica 	<ul style="list-style-type: none"> -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.
29-30-31	<p>Topics</p> <ul style="list-style-type: none"> -España: Antoni Gaudí. -La escultura modernista: Josep Llimona. <p>L.Objectives</p>	<ul style="list-style-type: none"> -Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas -Proyección videos 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes 	<ul style="list-style-type: none"> -Ornamental -Arquitectura geométrica -Parábola -Hipérbola 	<ul style="list-style-type: none"> -Atención a la diversidad (Dislexia): -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43

	<p>Reconocer el modernismo español, especialmente la obra de Antonio Gaudí.</p> <ul style="list-style-type: none"> - Comparar la obra arquitectónica de Antonio Gaudí, Víctor Horta y Adolf Loos. - Analizar la escultura modernista española, por ejemplo la obra del escultor Josep Llimona. 	<ul style="list-style-type: none"> -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". 	<ul style="list-style-type: none"> -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Marking</p> <p>Calidad de la presentación de los ejercicios</p> <p>Análisis y valoración de los ejercicios realizados</p> <p>Presentación de trabajos (30%)</p> <p>Trabajos en grupo (20%)</p> <p>Exámenes (50 %)</p>	<ul style="list-style-type: none"> -Volutas -Carácter ecléctico -Inspiración historicista -Renaixença -Coetáneos -Trencadís -Batlló -Desconsuelo, Juventud, Cordelia, Meditación, Belleza 	<ul style="list-style-type: none"> -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura insertados en extensiones.
32-33	<p>Topics</p> <ul style="list-style-type: none"> -El cartel publicitario en Cataluña: Alexandre de Riquer -La decoración modernista. -El mobiliario modernista. <p>L.Objectives</p> <ul style="list-style-type: none"> -Comentar la importancia de la cartelística española, 	<ul style="list-style-type: none"> -Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas -Proyección videos -Análisis formal y estético -Ejercicio expresión oral de detección de influencias 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios 	<ul style="list-style-type: none"> -Pintura japonesa -Promoción comercial -Decoración simbólica -Líneas espesas -Tonalidad cromática apagada -Vitalidad -Ornamental y simbólico 	<ul style="list-style-type: none"> -Atención a la diversidad (Dislexia): -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 -Fichas tangibles de memoria visual

	<p>especialmente relevante en la obra de Alexandre de Riquer.</p> <p>-Identificar la tipología del mobiliario modernista.</p>	<ul style="list-style-type: none"> -Discusión y análisis de contextos -Extensión "Importante" -Ficha "Reflexiona". -Resumen escrito fin de tema 	<ul style="list-style-type: none"> -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>-Análisis y valoración de los ejercicios realizados</p> <p>Marking</p> <p>Presentación de trabajos (30%)</p> <p>Trabajos en grupo (20%)</p> <p>Exámenes (50 %)</p>	<ul style="list-style-type: none"> -Arabescos, lianas, algas y lirios -Exóticos -Ondulantes -Líneas látigo o serpentinas -Ninfas, sirenas, damas voluptuosas -Maderas nobles -Horta, Gaudí Mackintosh -Escuela De Nancy -Michael Thonet 	<p>-Ejercicios de lecto-escritura insertados en extensiones.</p>
34	<ul style="list-style-type: none"> -Entrega trabajos -Examen 					
35	<p>Topics</p> <p>-La decoración en vidrio: C. Tiffany y E. Gallé</p> <p>-La joyería modernista.</p> <p>L.Objectives</p> <p>- Describir la evolución en la técnica del vidrio que supone la obra de Émile Gallé y Louis Comfort Tiffany.</p>	<ul style="list-style-type: none"> -Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas -Proyección videos -Análisis formal y estético -Ejercicio expresión oral de detección de influencias 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers -Ordenador -Exámenes anteriores -Quizlet 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes -Calidad de la presentación de los ejercicios 	<p>Tiffany</p> <ul style="list-style-type: none"> -Ventanas y lámparas en vitral -Mosaicos de vidrio -Vidrio soplado 	<p>-Atención a la diversidad (Dislexia):</p> <ul style="list-style-type: none"> -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 -Fichas tangibles de memoria visual

	<ul style="list-style-type: none"> - Analizar los elementos claves de la joyería modernista, utilizando, las obras de René Lalique y Lluis Masriera. 	<ul style="list-style-type: none"> -Discusión y análisis de contextos -Extensión "Para saber más" -Extensión "Curiosidad" -Extensión "Comprueba lo aprendido" -Extensión "Importante" -Ficha "Reflexiona". -Actividad de lectura -Resumen escrito fin de tema 	<ul style="list-style-type: none"> -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Marking resources</p> <p>Presentación de trabajos (30%)</p> <p>Trabajos en grupo (20%)</p> <p>Exámenes (50 %)</p>	<ul style="list-style-type: none"> -Análisis y valoración de los ejercicios realizados 	<ul style="list-style-type: none"> -Cerámica, joyería y trabajos en metal -Emile Gallé -Marquetería -Monturas -Formas zoomorfas -Ánforas, platos, vidrieras -Apariencia opaca y semi translúcida -Vidrio tallado y templado -Cloisonné -Gemas brillantes -Ópalos y ámbar -René Lalique -Lluis Masriera -Orfebre -Esmaltado 	<ul style="list-style-type: none"> -Ejercicios de lecto-escritura insertados en extensiones.
36-37	<p>Topics</p> <ul style="list-style-type: none"> - Arts & Crafts. -William Morris <p>L.Objectives</p>	<ul style="list-style-type: none"> -Introducción oral -Proyección digital -Lectura de contenidos pdf -Visualización diapositivas -Proyección videos 	<ul style="list-style-type: none"> -Libro de texto -Documentos digitales -Proyector -Cuadernos anotaciones -Chromebook -Speakers 	<p>Assessment Criteria</p> <ul style="list-style-type: none"> -Asistencia, participación, atención -Realización de ejercicios escritos y exámenes 	<ul style="list-style-type: none"> -Producción en masa -Estandarización -Aesthetic discontent -John Ruskin -Aesthetic movement 	<ul style="list-style-type: none"> -Atención a la diversidad (Dislexia): -Uso de textos adaptados -Tipografía adaptada: Font: Normal text, Verdana, size: 1.43 	

	<ul style="list-style-type: none"> -Debatir acerca del movimiento romántico de vuelta a la fabricación artesanal "Arts and Crafts" inglés. -Comentar los planteamientos estéticos de William Morris. 	<ul style="list-style-type: none"> -Análisis formal y estético -Ejercicio expresión oral de detección de influencias -Discusión y análisis de contextos -Extensión "Para saber más" -Extensión "Curiosidad" -Extensión "Comprueba lo aprendido" -Extensión "Importante" -Ficha "Reflexiona". -Actividad de lectura -Resumen escrito fin de tema 	<ul style="list-style-type: none"> -Ordenador -Exámenes anteriores -Quizlet -Moovly -Prezzi -Youtube -Drive -Fichas de memorización visual 	<p>Marking resources</p> <p>Presentación de trabajos (30%)</p> <p>Trabajos en grupo (20%)</p> <p>Exámenes (50 %)</p>	<ul style="list-style-type: none"> -Arts and Crafts -William Morris -Animadversión -Manufacturado -Papeles pintados -Concepto vanguardista -Revestimientos 	<ul style="list-style-type: none"> -Fichas tangibles de memoria visual -Ejercicios de lecto-escritura insertados en extensiones.
38	Resumen -Repaso-Past Papers					

Contents

Subject: Art	Year 12	Teacher: Adrian Cortadi Rodriguez
No. of lessons per week: 5 As Art & Design AQA spec 7202	Date: 2023-24	

Time scale	Topics	Curriculum concepts/ skills and competencies	Learning styles	Assessment Criteria; tests/ projects etc.
<u>Sept-Oct</u> <u>Nov</u>	<p>Learn the assessment objectives that students will be graded on.</p> <p>Learn how to develop an idea.</p> <p>How to experiment with an idea.</p> <p>How to use the work of other artists/designers to inspire.</p> <p>How to write about your work and how to be critical in a way that promotes development.</p> <p>Skills for rendering final</p>	<ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - Expression - Fluidity - Impasto - Atmosphere - First-Hand Studies from Primary Sources. 	<p>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, Ydáñez.</p> <p>Auditory: material and documentary films.</p> <p>Read/Write: key vocabulary: Chiaroscuro, Tone, fragmentation, overlapping, texture, features, modelling, color modulation, flesh tones, negative shapes, composition, form, expression, shape, line, likeness, subjective, objective, drapery, detail, under painting, gesture. Shiny. Rough. Pattern. Scaly. Scratched. Colored. Broken</p>	<p>Portfolio</p> <p>AO1: Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding.</p> <p>AO2: Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops.</p> <p>Observation, contribution and research. Sketchbooks, participation in class, independent work, classwork books, final outcomes, written notes for supporting ideas, observation, contribution and research.</p> <p>Assessment by the teacher, classwork grades, weekly homework</p>

	artworks successfully.	<ul style="list-style-type: none"> - '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. 	<p>Kinaesthetic: Assessment objectives met. Completed units of work in a Coursework Book, fully evaluated and developed. Final works of art.</p>	grades. Personal tracker. Also, assessment opportunities to take place through constant dialogue.
<u>Dec-Jan-Feb</u>	PERSONAL PROJECT DEVELOPMENT Component 1-	<ul style="list-style-type: none"> - 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. - 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. 	<p>Visual: Suggested artists: Edward Hopper, Richard Diebenkorn, John Virtue, Michael Andrews, Oskar Kokoschka, 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.</p> <p>Auditory: material and documentary films.</p> <p>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,</p>	<p>Portfolio</p> <p>AO3: Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress</p> <p>AO4: Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements</p> <p>Observation, contribution and research. Sketchbooks, participation in class, independent work, classwork books, final outcomes, written notes for supporting ideas, observation, contribution and research.</p> <p>Assessment by the teacher,</p>

			<p>monumentality, architecture, abstraction Kinaesthetic: Sketches, paintings, collages, computer aided art photo manipulation.</p>	<p>classwork grades, weekly homework grades. Personal tracker. Also, assessment opportunities to take place through constant dialogue.</p>
<u>March-April</u> <u>May-</u>	FINAL PIECE & PERSONAL EVALUATION <i>- Component 1</i>	<p>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.</p>	<p>Visual: Suggested artists: Depending on the topic.</p> <p>Auditory: Depending on topic</p> <p>Read/Write: key vocabulary: depending on topic</p> <p>Kinaesthetic: depending on topic</p>	<p>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.</p>



Contents

Year 12 AS Level Geography				
Subject: Geography (Syllabus 9696)		Year: 12	Teacher: Mrs WilMo	
No. of lessons per week: 5			Date: 2023-24	
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 September	Topic 1: Hydrology and fluvial geomorphology	<p>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.</p> <p>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</p>	<p>Texts: Hodder Cambridge International AS and A Level Geography Cambridge Resources</p> <p>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.</p> <p>Read / Write: Continual use of textbooks and websites to research topics, create notes, answer exam questions, create short</p>	<p>Continuous teacher / self and peer assessment of written work and discussions.</p> <p>Past Paper Qs. Mock exams - Dec</p> <p>Final Exam - May</p>
Weeks 6-10	Topic 2: Atmosphere and weather	<p>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.</p> <p>2.1 Diurnal energy budgets 2.2 The global energy budget 2.3 Weather processes and phenomena 2.4 The human impact</p>		

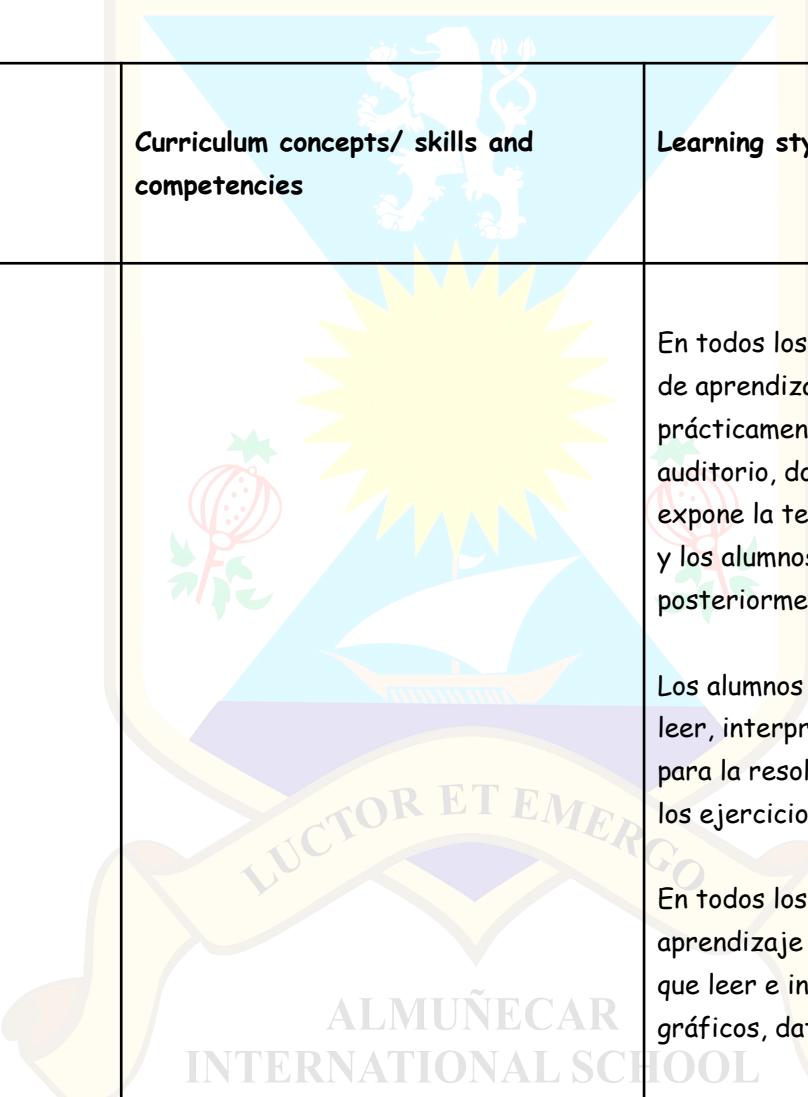
Weeks 11-15	Topic 3: Rocks and weathering	<p>Learners should understand the global pattern of tectonics and the resulting landforms and processes. At a more local scale learners should be able to describe and explain weathering and slope processes and how humans can impact upon this.</p> <p>3.1 Plate tectonics 3.2 Weathering 3.3 Slope processes 3.4 The human impact</p>	<p>presentations. Student's use of newspapers / new websites to be aware of current issues.</p> <p>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.</p>	
Weeks 16-20	Topic 4: Population	<p>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.</p> <p>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</p>	<p>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.</p> <p>Kinaesthetic: Fieldwork</p>	
Weeks 21-25	Topic 5: Migration	<p>Learners should be able to explain how migration forms a component of population change. They should be able to explain what pushes and pulls people from and to locations and how we can manage internal migration.</p> <p>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</p>		
Weeks 26-30	Topic 6: Settlement dynamics	<p>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.</p>		

		<p>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</p>		
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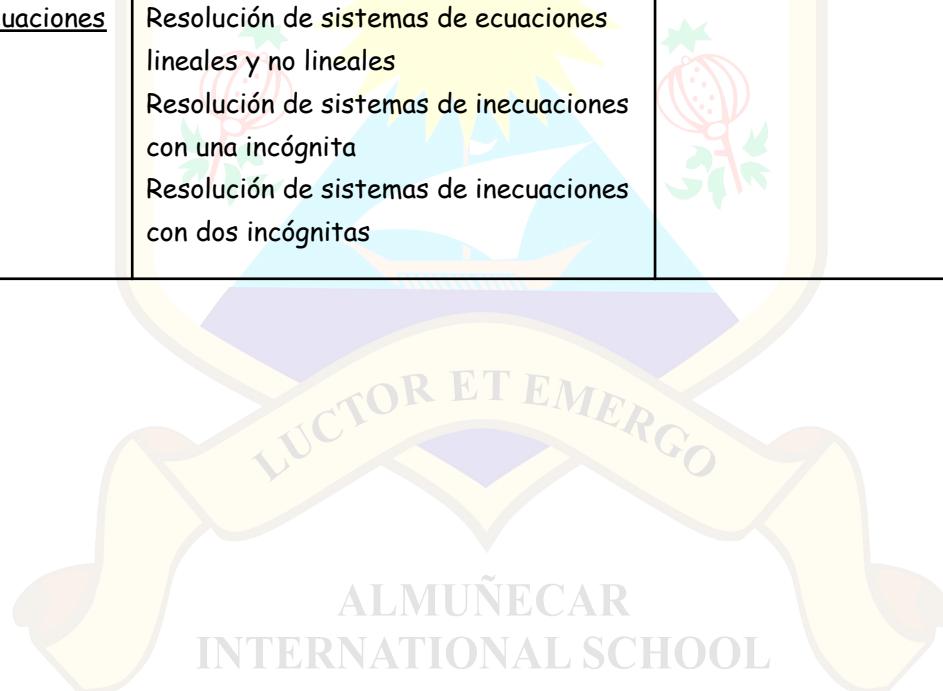


[Contents](#)

Subject: PCE Matemáticas Aplicadas	Year 12	Teacher: Lidia Jiménez
No. of lessons per week: 3	Date: 2023-24	

Time scale	Topics	Curriculum concepts/ skills and competencies	Learning styles	Assessment Criteria; tests/ projects etc.
Aprox 1,3 temas por mes			<p>En todos los temas el estilo de aprendizaje está basado prácticamente en un estilo auditóriо, donde el profesor expone la teoría y ejercicios y los alumnos escuchan para posteriormente practicar</p> <p>Los alumnos y alumnas han de leer, interpretar y redactar para la resolución de todos los ejercicios.</p> <p>En todos los temas se incluye aprendizaje visual al tener que leer e interpretar gráficos, datos y tablas</p>	

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



December	Análisis <u>Tema 4: Funciones</u>	<p>Estudio de funciones reales de variable real.</p> <p>Gráfica y tabla de una función.</p> <p>Descripción con la terminología adecuada de funciones dadas mediante sus gráficas.</p> <p>Utilización de tablas y gráficas funcionales para la interpretación de fenómenos sociales.</p> <p>Problemas de interpolación y extrapolación lineal.</p>		<p>Ejercicios realizados durante la clase</p> <p>Ejercicios para entregar</p> <p>Examen</p>
January/ February	 <u>Tema 5: Límite de funciones</u>	<p>Aproximación al concepto de límite de una función en un punto y en el infinito</p> <p>Aproximación al concepto de continuidad. Estudio de continuidad de las funciones polinómicas, racionales, raíz, exponenciales y logarítmicas.</p> <p>Cálculo de límites</p>		<p>Ejercicios realizados durante la clase</p> <p>Ejercicios para entregar</p> <p>Examen</p>
February/ March	 <u>Tema 6: Derivadas</u>	<p>Estudio del concepto de derivada de una función en un punto. Interpretación geométrica.</p> <p>Cálculo de derivadas.</p> <p>Estudio de crecimiento y puntos críticos con derivada</p> <p>Utilización de las funciones como herramienta para la resolución de problemas relacionados con las ciencias</p>		<p>Ejercicios realizados durante la clase</p> <p>Ejercicios para entregar</p> <p>Examen</p>

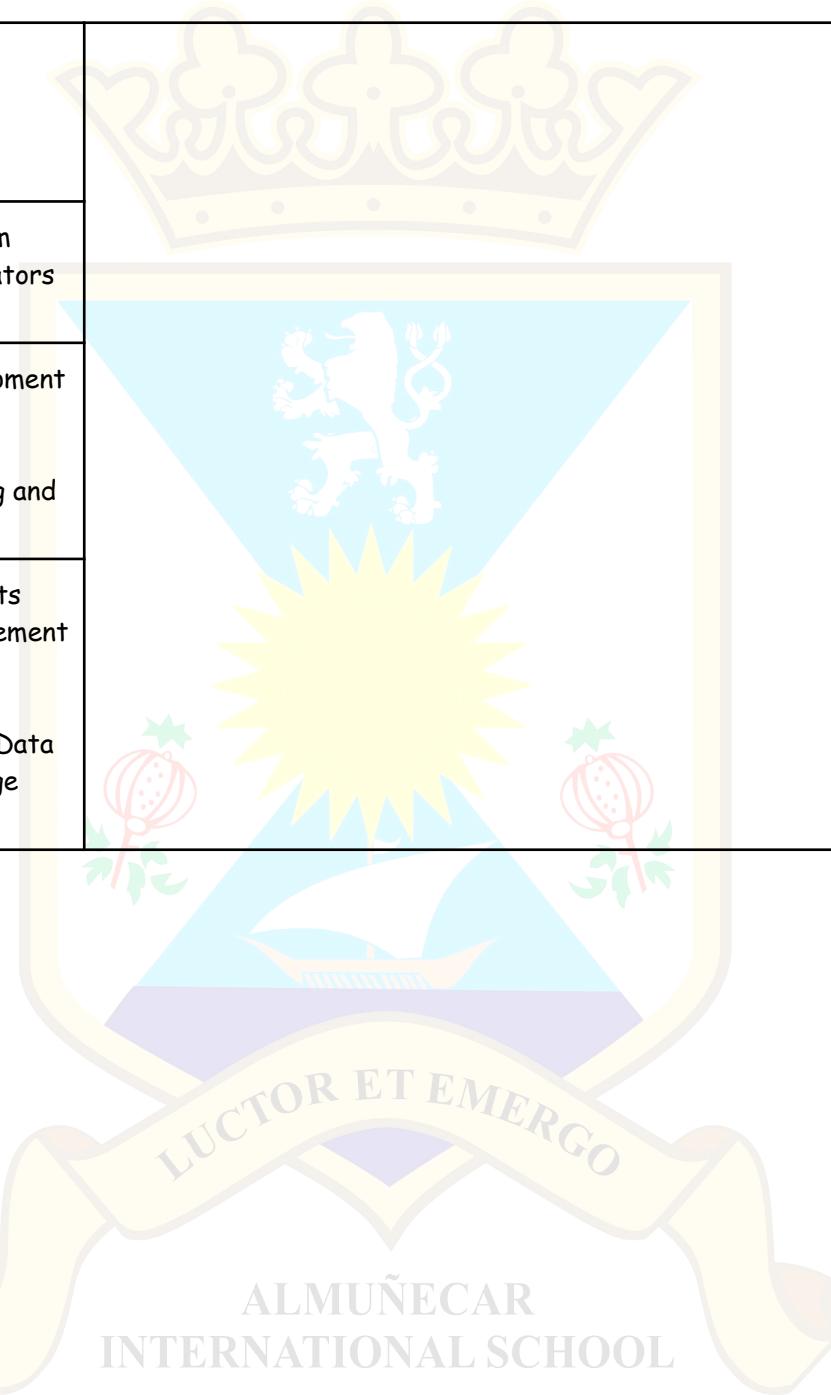
		sociales: Financieros, de población, etcétera, y para la interpretación de fenómenos sociales y económicos.		
March / April	Probabilidad <u>Tema 7: Probabilidad</u>	Cálculo de probabilidades en experimentos simples o compuestos. Asignación de probabilidades. Estudio de la probabilidad en experimentos repetidos e independientes		Ejercicios realizados durante la clase Ejercicios para entregar Examen
April	<u>Tema 8: Distribuciones de probabilidad</u>	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 <u>Tema 9: Estadística unidimensional</u>	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	<u>Tema 10: Integrales</u> (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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Contents

Year 12 AS Level Computer Science (CIE 9618)							
Subject: Computer Science					Teacher: P. Reichenbach		
Number of lessons per week: 5					Date: 2023-24		
Weeks (approx)	Topic (theory)	Curriculum concepts/skills and competencies		Weeks (approx)	Topic (programming)	Curriculum concepts/skills and competencies	Teaching & Learning Styles
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.
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)	Past Paper questions. Mock exams - January Final Exam - May
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	Continual use of textbooks and websites to
8-10	Topic 2 - Communication	2.1 Networks including the internet					
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		research topics, create notes, answer exam questions, create short presentations. Student's use of newspapers / new websites to be aware of current issues.	
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)			

Contents

Subject: French	Year 12	Teacher: V Bernard
No. of lessons per week: 5	Date: 2023-24	

Time scale (approx)	Topics	Curriculum concepts/ skills and competencies	Learning styles	Assessment Criteria; tests/ projects etc.
		<p>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</p> <p>VARK also included in the use of digital textbook and interactive exercises</p> <p>The first year of International AS level French covers four GTA's (General Topic Area) which are:</p> <p>Topic Area 1 - Youth matters Topic Area 2 - Lifestyle, health and fitness Topic Area 3 - Environment and travel Topic Area 4 - Education and Employment</p>		
Sept/Oct	Topic Area 1 - Youth matters Subtopic: Family relationship	To be able to discuss different types of family units 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	Teaching & Learning Styles (VARK): <p>Visual: use of pictures/videos and PowerPoint Auditory: Listening exercises in textbook, video clips, assessment</p>	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

	<p>s and friendships</p> <p>Subtopic: Peer pressure and role models</p>	<p>Differences between generations</p> <p>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</p>	<p>Love songs in French</p> <p>Read/Write: basic and extended exercises in textbook, newspaper articles</p> <p>Kinaesthetic: Multimedia use,</p>	
November	<p>Topic Area 1 - Youth matters</p> <p>Subtopic: Music and Fashion</p> <p>Subtopic: Technology and communication</p>	<p>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</p> <p>The advantages and disadvantages of technology Are we too dependent on technology? The role of technology in education and the work place</p>	<p>Teaching & Learning Styles (VARK):</p> <p>Visual: use of pictures/videos and PowerPoint</p> <p>Auditory: Listening exercises in textbook/video clips, assessment</p> <p>Read/Write: basic and extended exercises in textbook/book software, newspapers articles</p> <p>Kinaesthetic: Multimedia use</p>	<p>Punctual vocabulary/ grammar tests; peer assessed and checked by teacher.</p> <p>End of unit test, four skills assessed, exam type questions, mixed of peer/self assessment, checked by teacher with feedback</p>
December /January	Topic Area 2 - Lifestyle, Health and Fitness		<p>Teaching & Learning Styles (VARK):</p> <p>Visual: use of pictures/videos and PowerPoint</p>	<p>Punctual vocabulary/ grammar tests; peer assessed and checked by teacher.</p> <p>End of unit test, four skills assessed, exam type questions, mixed of peer/self assessment, checked by teacher with feedback</p>

	<p>Subtopic: Food and Diet</p> <p>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</p> <p>Subtopic: Sport and Exercise</p> <p>How to encourage people to take exercise and to play sport Should sport be compulsory at school? The importance of the Olympic Games and other major sporting events</p> <p>Subtopic: Health issues</p> <p>Major health issues in society The health service What is a healthy lifestyle? The work/life balance</p> <p>Mock examination</p>	<p>Auditory: Listening exercises in textbook assessment Read/Write: basic and extended exercises in textbook/book software Kinaesthetic: Multimedia use-Powerpoint presentation</p>	
February	<p>Topic Area 3 - Environment and travel</p> <p>Subtopic: Tourism, travel and transport</p> <p>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</p> <p>Subtopic: Natural disasters and weather</p> <p>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</p>	<p>Teaching & Learning Styles (VARK):</p> <p>Visual: use of pictures/videos and PowerPoint</p> <p>Auditory: Listening exercises in textbook assessment</p> <p>Read/Write: basic and extended exercises in textbook/book software</p> <p>Kinaesthetic: Multimedia use.</p>	<p>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</p>

	Subtopic: Climate change & Energy/pollution	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?		
March/April	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	Teaching & Learning Styles (VARK): 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	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
May/June Ja	Topic Area 4 - Education and employment		Teaching & Learning Styles (VARK): Visual: use of pictures/videos and PowerPoint	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

	<p>Subtopic: Jobs and unemployment</p> <p>Revision and examination</p>	<p>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</p>	<p>Auditory: Listening exercises in textbook, assessment Read/Write: basic and extended exercises in textbook Kinaesthetic:Multimedia use</p>	<p>This chapter: focus on reading and listening Exam papers practice End of year 1 examination-IAS Level</p>
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