



GRADE 11 ENTRANCE EXAM SYLLABUS

For Student Applicants

Subjects	English, Math, Biology, Chemistry, Arabic
Curriculum / Standards	CCSS (English and Math), NGSS (Biology and Chemistry), Qatar National Curriculum (Arabic)

Purpose: This syllabus outlines the knowledge, skills, and competencies expected from applicants seeking admission to Grade 11. It is designed to guide students and families in preparation for the entrance examinations.

English (CCSS)

Domain	Expected Knowledge and Skills
Reading Comprehension (Literary and Informational Texts)	<ul style="list-style-type: none"> Determine central idea, theme, and supporting details. Analyze character traits, development, and motivation. Trace sequence of events and plot development. Interpret vocabulary in context. Identify author's purpose, tone, and point of view. Distinguish fact from opinion. Make inferences and draw conclusions using textual evidence. Interpret figurative language and other literary devices. Recognize text structures such as cause and effect, comparison, and chronology.
Language Conventions	<ul style="list-style-type: none"> Apply correct grammar, usage, and sentence structure. Use subject-verb agreement and consistent verb tense accurately. Recognize and use parts of speech appropriately. Use punctuation and capitalization correctly in context.
Writing	<ul style="list-style-type: none"> Write a coherent descriptive or narrative composition of approximately 350-450 words. Develop ideas clearly with an introduction, body, and conclusion. Use relevant details, accurate language, and varied sentence structures. Demonstrate organization, coherence, and grammatical accuracy.

Mathematics (CCSS)

Domain	Expected Knowledge and Skills
Algebra and Functions	<ul style="list-style-type: none"> Solve linear equations, literal equations, and absolute value equations. Graph and interpret linear equations and inequalities. Determine slope, intercepts, and rate of change. Interpret function notation and identify inverses of simple functions. Describe transformations of parent functions.
Sequences, Polynomials, and	<ul style="list-style-type: none"> Write and interpret arithmetic sequences in recursive and explicit

Domain	Expected Knowledge and Skills
Exponential Models	<ul style="list-style-type: none"> form. Factor algebraic expressions and polynomials using common factors. Model exponential growth and decay situations.
Statistics and Data Analysis	<ul style="list-style-type: none"> Interpret data presented in tables and graphs. Determine and use a line of best fit or linear regression model.
Geometry and Trigonometry	<ul style="list-style-type: none"> Use right triangle trigonometric ratios: sine, cosine, and tangent. Apply properties of special right triangles. Solve area and measurement problems involving algebraic expressions.
Applications	<ul style="list-style-type: none"> Solve real-world problems involving finance, rates, systems, and algebraic reasoning.

Biology (NGSS)

Domain	Expected Knowledge and Skills
Cell Biology	<ul style="list-style-type: none"> Describe cell structure and function. Compare prokaryotic and eukaryotic cells. Explain transport across the cell membrane, including diffusion and osmosis.
Molecular Biology and Genetics	<ul style="list-style-type: none"> Explain the role of DNA in heredity and protein synthesis. Interpret basic inheritance patterns using Punnett squares. Describe the relationship among genes, traits, and variation.
Evolution and Ecology	<ul style="list-style-type: none"> Explain natural selection, adaptation, and evidence for evolution. Describe energy flow in ecosystems, food chains, and food webs. Analyze interactions between organisms and their environment.
Scientific Practices	<ul style="list-style-type: none"> Interpret biological data, diagrams, and graphs. Plan and evaluate simple investigations. Construct explanations using evidence.

Chemistry (NGSS)

Domain	Expected Knowledge and Skills
Matter and Atomic Structure	<ul style="list-style-type: none"> Classify matter as elements, compounds, and mixtures. Distinguish between physical and chemical properties and changes. Describe atomic structure, isotopes, and basic electron arrangement. Use the periodic table to identify groups, periods, and general trends.
Bonding and Chemical Reactions	<ul style="list-style-type: none"> Differentiate between ionic and covalent bonding. Write and interpret basic chemical formulas and equations. Identify common reaction types and apply the law of conservation of mass. Balance simple chemical equations.
Quantitative Chemistry and Solutions	<ul style="list-style-type: none"> Apply the mole concept and determine molar mass in introductory contexts. Interpret balanced equations quantitatively in simple mole relationships. Describe solutions, concentration, and factors affecting solubility.
Acids, Bases, and Energy	<ul style="list-style-type: none"> Identify properties of acids and bases and interpret the pH scale. Differentiate between exothermic and endothermic reactions.
Scientific Practices	<ul style="list-style-type: none"> Follow laboratory safety procedures.

Domain	Expected Knowledge and Skills
	<ul style="list-style-type: none"> Analyze data tables, graphs, and observations to draw conclusions.

اللغة العربية

المجال	
القراءة والفهم	<ul style="list-style-type: none"> تحليل النصوص الأدبية والشعرية وفهم الفكرة العامة والأفكار الرئيسية والفرعية استنتاج المعاني الضمنية وتفسير المفردات من السياق تحليل الشخصيات والأحداث والصور الفنية والأساليب البلاغية
البلاغة	<ul style="list-style-type: none"> التعرّف على الطباق والجناس والصور الفنية مثل التشبيه والاستعارة والكتابة بيان دلالة الأساليب البلاغية وأثرها في المعنى
النحو والصرف	<ul style="list-style-type: none"> إعراب الكلمات والتراكيب في سياقات مختلفة التعرّف على أساليب الاستثناء والمدح والذم والتعجب والنداء والتوكيد وتوظيفها
الكتابة	<ul style="list-style-type: none"> كتابة نص نقاشي منظم يعرض رأيين مختلفين مدعّمين بالحجج التعبير عن الرأي الشخصي بوضوح مع توظيف أدوات الربط وعلامات الترقيم وسلامة اللغة

Note: This document is intended as a preparation guide. Questions may assess knowledge, application, analysis, and written communication appropriate for Grade 11 admission.