



# Grade 9: Subject Overview

## 2018-2019

**Subject Overview - Combind Arts**

<b>Unit title</b>	<b>Key concept</b>	<b>Related concepts</b>	<b>Global context</b>	<b>Statement of inquiry</b>	<b>Objectives/Objective strands/Assessment criteria</b>	<b>ATL skills/skill indicators</b>	<b>Content (topics, knowledge, skills)</b>
<b>Art</b>							
Street Art	Communication	Visual Culture, Expression	Fairness and Development	The culture of street art can be used to communicate opinions about inequality, difference, and inclusion.	A,B, C and D	Communication Skills, Social Skills	Banksy, Graffiti, social and political art
Individuality	Identity	Narrative, Expression	Identities and Relationships	Through art, we can express our identity and/or share a narrative of our identity formation.	A,B, C and D	Thinking Skills	Self-portraits (case studies from a variety of styles, including symbolism in F. Kahlo´s art). Exploration of new media and techniques, including collage and lino printing. Barbara Kruger´s art; photography & selfies
<b>Music</b>							
Music and identity	Identity	Audience, Boundaries, Expression, Genre, Interpretation, Narrative, Presentation	Globalization and sustainability	Acknowledging that we have a unique and inviolable musical identity fosters open-mindedness and global citizenship.	A: Knowing and understanding B: Developing skills C: Thinking creatively D: Responding	Thinking skills, Self-management skills	Every lesson, two students will share a composition with the group. From listening, thinking and reflecting, the group will discuss and document (process journal) what kind of identity or identities expressed through the composition. The compositions will also be discussed through musicological perspectives, regarding rhythm, time signature, instrumentation, form and so forth. The unit ends with a larger submission on music and identity, based on several lines of inquiry.
Winter concert	Communcation	Audience, Expression, Interpretation, Presentation	Personal and cultural expression	Learning how to interpret and reinforce the artwork of others broadens our musical understanding.	B: Developing skills D: Responding	Social skills, Communication skills	Songs provided by other grade levels to be interpreted and rehearsed in order to reinforce the student choir body.

Digital desing

Unit title	Key concept	Related concepts	Global context	Statement of inquiry	Objectives/Objective strands/Assessment criteria	ATL skills/skill indicators	Content (topics, knowledge, skills)
Infographic Poster	Communication	Function	Fairness and development - Inequality, difference and inclusion - Human capability and development; social entrepreneurs	Designers are able to communicate information through solutions that transcend language.	A: Inquiring and analysing, B: Developing ideas, C: Creating the solution, D: Evaluating	VI. Information literacy skills, XI. Creative thinking skills	Students will learn: - What is an infographic - Types of infographics - Collecting and understanding data - Using data to tell the story (finding a narrative) - Replace text with images to tell the story - Finding visual metaphors - Understanding the target audience's need - Using prior knowledge to design (proximity, alignment, repetition, contrast, vector and raster graphics, colour, etc.) - Wireframe - Layout design - Hierarchy
Tiny-house Design	Communities	Ergonomics, Function, Sustainability	Globalization and sustainability - Urban planning, strategy and infrastructure - Human impact on the environment	Considering sustainability when design our living space may have an impact on how we share our planet.	A: Inquiring and analysing, B: Developing ideas, C: Creating the solution, D: Evaluating	VI. Information literacy skills, VIII. Critical thinking skills, X. Transfer skills	Students will learn: - What is a Tiny house - Types of Tiny houses - Dimensions of Tiny house supporting trailers - Dimensions of shipping containers that are able to house a Tiny house - Downsizing (lifestyle, furniture, daily needs, etc.) - Off-grid living (solar energy collection and storage, rainwater collection and usage, solar toilets, etc.) - Sustainable living concepts - Smart design solutions (integrating functionality into an existing product to save space) - Environmental considerations - Using prior knowledge (blueprint, Sweet Home 3D, etc.)

**Individuals and Societies**

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French/Industrial Revolution	Change	innovation and revolution	Scientific and technical innovation	Innovations in science and technology can lead to revolutionary changes in the ways we live and work.	A: Knowing and understanding, C: Communicating, D: Thinking Critically	Self-managementBring necessary equipment and supplies to classSelect and use technology effectively and productivelyOrganization skillsMeet deadlinesKeep an organized and logical system of information files/notebooksUse study guidesThinking skillsCreative thinkingCritical thinking	Identify key factors and individuals that led to revolution in France and the IRExplore the causes and consequences of revolutionsExplore the relationship between causal factors and the impact of revolutionary change on societiesInvestigate the role of women in the FR, Child labor, absolutism, Napoleonic code, pollution, inventions, domestic system, treaty of Kanagawa, Meiji reforms, DBQ essay
Hazards	Systems	Resources	Time, place and space	Societies can be affected by different types of hazards and require innovative systems and resources in order to respond effectively to them.	A: Knowing and understanding B: Investigating, C: Communicating, (D: Thinking Critically Current Events)	Thinking skillsCreative thinkingCritical thinkingCommunication skillsThrough language: write for different purposesOrganise and depict information logically	Identify key features of earth's structureExplore the causes and consequences of natural hazardsExplore case studies of natural disasters and how people have responded to themInvestigate how disasters affect the identity of societies, Plate tectonics (divergent, transformative, convergent plate boundaries), case studies, types of volcanoes (composite, shield) News Report.
Population and migration	Change	Equity	Globalization and sustainability	The population of human societies changes due to a variety of processes, and sustainable development can help to promote more equity in these societies.	A: Knowing and understanding B: Investigating, C: Communicating,	Communication skillsThrough language: write for different purposesOrganise and depict information logically	Identify key vocabulary related to population trendsInterpret and develop population graphs (pyramids)Explore case studies of population change and how societies are confronting the challengesExamine social issues caused by population changeInvestigate examples of migration, push pull factors, population pyramids, birth rates, death rates, infant mortality, life expectancy, Infographic.
Globalization	Change	Globalization, processes	Globalization and sustainability	Globalization has occurred due to a variety of processes that have changed the world, bringing both opportunities	A: Knowing and understanding, C: Communicating,	Communication skillsThrough language: write for different purposesOrganise and depict information logically	Identify the causes and consequences of globalizationDefine globalizationExplore how globalization has affected languageExamine how globalization affected sport and the gaming industry

Language acquisition - English

Unit title	Key concept	Related concepts	Global context	Statement of inquiry	Objectives/Objective strands/Assessment criteria	ATL skills/skill indicators	Content (topics, knowledge, skills)
Rap Revolution	Connection	Context, purpose	Fairness and development	Language can be coded in universal ways to connect people and to promote fairness and development.	A, B, C and D	Communication Skills, Thinking Skills, Communication Skills	Principles of rapping in different languages (accents); RAP as a universal language code; use of slang; students analysing RAP songs (in connection with graffiti art), they compose own song and they apply to take part in a big music event organised to support a case (potential CAS link)
Identity Matters	Communication	Bias, message	Personal and cultural expression	Messages about beauty communicated in literature, art and media shape our perception of ourselves and become a part of identity formation.	A, B, C and D	Social Skills, Communication Skills, Thinking Skills	Describing people; defining beauty and identity, defining individuality and style; critical analysis of portraits in art (language), stereotypes and prejudices related to beauty and identity, "Face" by B. Zephaniah, perception of beauty and identity in media; personal narratives and poetry.
Travelling Writers	Creativity	Conventions, audience and purpose	Orientation in space and time	The conventions of travel writing serve the purpose of sharing experiences with a wider audience and developing a better sense of orientation in space and time.	A, B, C and D	Communication Skills, Thinking Skills, Social Skills,	Focus on audience and purpose in a variety of text types; Blogs and travelogs, conventions of travel writing, Journals, Personal stories vs fiction (fragments of Hatchet and Paulsen's journals), essays (Three New Yorks?), Scrap books and picture stories, tourist texts - promoting ecotourism, essence and purpose of travelling and the ways to document the travels. If this unit feels overlapping with Global Connections in MYP1, it can be replaced with a unit about conflicts from the IB book for English LA

The Meaning of Happiness	Culture	Points of view, context	Identities and relationships	Points of view on (happiness, health and) well-being are influenced by our identity and relationships, and the messages we find in the media and in our cultural environment.	A, B, C and D	Affective Skills, Communication Skills, Research Skills	conducting and analysing surveys, summaries, reports, health, happiness and well-being, focus on HYGGE - the Scandinavian concept of coziness and well-being (read about Scandinavian Design) - this unit stays in MYP 4 but will need to be replaced by another unit next year because the MYP 4 next year would have had both this unit and the Between Dreams to Extremes one - possibly do the Identity as my Brand unit from IB books OR design a unit about the power of reflection, improvement, growth mind-set, and personal writing, to prep them for Personal Project ("Try again!").
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**Language acquisition - German**

Unit title	Key concept	Related concepts	Global context	Statement of inquiry	Objectives/Objective strands/Assessment criteria	ATL skills/skill indicators	Content (topics, knowledge, skills)
East and west	Connections	Culture, Point of view	Orientation in time and space	The connections between East and Western Germany affected culture and point of view over time	A: Comprehending Spoken and visual text, B: Comprehending Written and visual text, C Communicating in response to Written, Spoken and visual text. D: Using language	Thinking skills, Collaborating skills	By watching films and reading excerpts and stories, students will explore the difficult conditions that was affecting the Divided Germany. Students will also learn idioms some regional words.
Accents and idioms in everyday German	Communication	Idioms, Word choice	Identities and relationships	The way we express ourselves is affected by our culture, and choice of words and idioms reveals who we are.	A: Comprehending spoken and visual text, C: communicating in response to spoken and visual text, D Using language	Creative thinking skills, Communication skills.	Students will be exposed to a broad variety of television shows and radio shows from the German speaking area, and through that learn about how Native speakers sound and pronounce words differently depending on where they are from. Students will have to respond orally to a given item.

Fairytale route	Culture	Context	Personal and cultural expression	German folklore is an important cultural factor that even today is important to peoples lives	B: Comprehending written and Visual text, C: communicating in response to spoken, written and visual text, D: Using language	Collaboration skills, Thinking skills	Students will follow the fairytale route in Germany, and be introduced to important biographies such as the Brothers Grimm. The main focus in language this time is expansion of vocabulary and discovering how German is written in the context of fairy tales, as well as a grammatical review of the case system and introduction of Genitiv.
Commercials	Creativity	Audience	Globalization Sustainability	Commercials use creative language to meet their audience in a globalized world	A: Comprehending spoken and visual text, C: Communication in response to spoken and visual text, D: Using language	Communication skills, thinking skills	Students will work with German commercials and understanding how they are made, making creative use of language and visual elements. They will make written responses to them.

**Language and literature - Norwegian**

Unit title	Key concept	Related concepts	Global context	Statement of inquiry	Objectives/Objective strands/Assessment criteria	ATL skills/skill indicators	Content (topics, knowledge, skills)
Innovative communication (Link with Science or Art)	Communication	Self-Expression, Character, Style	Scientific and Technical innovation	Technical and Scientific innovations are an important part of the modern communication style, and important for your character in Self expression	A: Analysing, B: Organising, D: Using Language	Creative thinking skills, Communication skills, collaborative skills.	Students will explore how the scientific and technical innovations over the last 200 years have revolutionised the way we communicate. We will look at the importance of the invention of Photography/Video/Digital media/Sosial Media. Students will practice their analytical writing as well as how to use illustration in an effective way.
A story of life	Perspective	Audience Imperatives, Setting, Context	Orientation in time and space	Our place in time and space impacts our perspectives, understanding people and stories in their setting and context make us able to tell their story.	B: Organising, C: Producing Text, D: Using Language	Communication skills, Research Skills, Self Management Skills, Thinking skills	We will inquire into the documentary genre, and how different stories are told using visual, non verbal as well as verbal techniques. Students will interview a person with a strong life story, such as an refugee. They will produce a documentary where they will retell this story with respect for the setting and Context in which it belongs, and with reflection around choices on an audience.

Living a nightmare	Identity	Genre, Character	Fairness and development	Literature can talk about difficult topics in fictional forms such as unfairness. The way topics are discussed will depend on the genre and identity of the author.	A: Analysing, B: Organising, D: Using Language	Critical thinking skills, collaborative skills, affective skills.	We will inquire into how different literary genres treat similar subjects. We will focus in Ingmar Bergmann's Fanny and Alexander and Stien by Gabriel Scott, and look at how the main characters in these stories survive and develop through a difficult childhood. And draw parallels to other stories the students know, which treats the subject differently.
Small audience - big case	Creativity	Audience Imperatives, Purpose	Personal and cultural expression	By being creative in the way we address our audience, we can convey important cases to children.	B: Organizing C: Producing Text, D: Using Language	Research skills, Thinking skills, Communication skills	Students will inquire into important topics they find interesting, and make a thoughtful presentation for younger children.

**Mathematics**

Unit title	Key concept	Related concepts	Global context	Statement of inquiry	Objectives/Objective strands/Assessment criteria	ATL skills/skill indicators	Content (topics, knowledge, skills)
Why does algebra look so clever?	Relationship	Simplification	Identities and relationships	Finding and expressing things in common helps us to simplify and improve relationships.	A,B,C,D	Communication, Critical Thinking	Please see Math skill map.
Quadratic Equations	Relationships	Representation	Globalization and sustainability	Representing relationships visually and algebraically can allow us to find and optimize 'best case scenarios' and sustainable solutions.	A,C,D	Organization	Please see Math skill map.
Simultaneous equations	Relationships	Equivalence, systems	Identities and Relationships	How do we convert real life problems into simultaneous equations?	B,C,D	Communication, Organization, Reflection	Please see Math skill map.
Can you walk the line ?	Logic	Equivalence	Orientation in space and time	Mathematical knowledge is built through logical structures, developed over time and transferred to equivalent situations.	A C D	Communication, Critical thinking	Please see Math skill map.
Measurement	Form	Model, Space	Scientific and Technical innovation	Measurement helps us to form and model mathematical shapes,	A B C D	Critical Thinking	Please see Math skill map.



				contributing to innovation in science and technology.			
What do I get by learning these things ?	Form	Justification	Orientation in space and time	Statements about the spaces and shapes around us can be justified to show they are invariant through space and time.	A B C D	Communication, Organization	Please see Math skill map.
The only sure thing.	Logic	Measurement	Personal and Cultural expression	An individual's understanding of risk and chance is highly dependent on both logic and their personal experience.	B C D	Critical thinking	Please see Math skill map.

**Physical and health education**

<b>Unit title</b>	<b>Key concept</b>	<b>Related concepts</b>	<b>Global context</b>	<b>Statement of inquiry</b>	<b>Objectives/Objective strands/Assessment criteria</b>	<b>ATL skills/skill indicators</b>	<b>Content (topics, knowledge, skills)</b>
Team Sports (floor hockey)	Communication	Interaction, Space	Identities and relationships	Communication encourages interaction and enhanced use of space.	A: Knowing and understanding, B: Planning for performance, C: Applying and performing, D: Reflecting and improving performance	I. Communication skills, III. Organization skills, IV. Affective skills, V. Reflection skills	Positioning, shooting on goal, rules of the game, puck handling and stick work, passing to teammates, working with teammates, fair play, defensive positioning, offensive strategies, NHL warm ups, three on three, pass-shoot drills, shooting for accuracy, shooting in the air, shooting on the rink
Personal Health and Fitness	change	function, systems	Identities and relationships	Personal fitness can change with a commitment to monitoring and recording standards	A: Knowing and understanding, B: Planning for performance, C: Applying and performing, D: Reflecting and improving performance	Self-management skills	Fitness challenges, cross-fit competitions, resting hear rate, BMI, nutrition, mindfulness
Organizing an event	Communication	Perspective, interaction	Identity and relationships	Managing people and organizing events requires cooperation between differing perspectives	A: Knowing and understanding, B: Planning for performance, C: Applying and	Communicatin, organization	Event planning, time management, advertising, quality control, creative play, target audience, game design concepts

					performing, D: Reflecting and improving performance		
Nutrition and personal health	Relationships	Systems, function	Identities and relationships	Skills and strategies for one sport can be applied to success in other	A: Knowing and understanding, D: Reflecting and improving performance	I. Communication skills	Health responsibility, self-monitoring, nutrition, health risk factors, self-expression, self-enjoyment, stress management

**Sciences**

Unit title	Key concept	Related concepts	Global context	Statement of inquiry	Objectives/Objective strands/Assessment criteria	ATL skills/skill indicators	Content (topics, knowledge, skills)
1. What is our place in space?	Systems	Movement, Interaction	Orientation in Space and Time	Theories unify our understanding of systems, including the movement and interaction of astronomical bodies, the geology of our planet and the organisms it sustains.	A, D	Critical thinking, Research, Communication	Theories of origin: Big Bang theory, LUCA (Last Common Universal Ancestor) and Evolution, Tectonics. Solar system, planet, satellites, geology; Formulae: Density, $F=ma$ , Gravitational Field strength; GPE, KE
2. How do we represent chemical change?	Change	Evidence, Consequences	Identities and relationships	The evidence for a chemical reaction is a consequence of changes in the arrangement of atoms within or between participating substances.	A, B/C (Preventing corrosion)	Organisation, Critical thinking, Communication,	Revise chemistry (MYP 3) eg atoms, molecules, symbols, periodic table; Electron configuration and ionic, covalent, metallic bonding. Word equations for types of reaction (single displacement, double displacement, oxidation/corrosion/combustion)
3. Resistance is futile! Electricity transforms lives!	Relationships	Energy, Transformation	Fairness and development	When an energy transformation incorporates current electricity, the energy relationships are easily measurable.	A, D	Collaborative skills, Research skills (ICT), Communication skills	Revise MYP 3 - Series and parallel circuits, resistance, Energy transformations (light, heat, sound, movement and magnetic effects. Motors and generators. Interpreting circuit diagrams (more complex than MYP 3); Formulae covered: $V = IR$ ,

							Power, Transformers as er subject guide. ACTION: Solar energy application.
4. What do plants do for us?	Systems	Environment, Balance	Globalisation and sustainability	Through gas exchange, the metabolism of living systems contributes to the balance of gases in our environment.	B/C Duck weed investigation.	Collaborative skills, Communication, Thinking	Recall interactions bwteen organisms (from MYP 1)- food chains and food webs, energy flow.; The structure and function of plants (cells, tissues, organs etc) ; The role of stomata, chloroplasts. Photosynthesis and respiration, Plant nutrients.