

In 5 LAIS (9th grade) students study the following / are supposed to reach the following levels:

(This is just an extract from the curriculum!)

English first language

English 9 is a course that is designed to prepare students for English 10, and is meant to encompass all types of learning styles. Through the study of various literary genres, including visual and multimedia texts, English 9 integrates listening and speaking, reading and writing, as well as viewing and representing. Students enrolling in this course are expected to possess sound reading and writing ability, as well as, a genuine interest in literature and the communication process. Furthermore, Grade 9 students are expected to consolidate and master the required skills to fulfill their learning in the K-9 program of studies, and understand the aspects of correctness, such as: punctuation, grammatical agreement and sentence construction.

General Objectives:

- Students will begin to develop an ability to communicate with increasing maturity, logic and clarity in written, verbal and representing forms.
 - Students will develop an ability to listen, speak, read, write, view and represent with insight and imagination that will result in increased satisfaction and enjoyment.
 - Students will examine a variety of thoughts that will expand their understanding of themselves, others and the societal values that impress upon their lives.
 - Students will recognize and understand the meaning, power and use of language.
 - Students will develop and support critical, analytical and aesthetic judgements formed from personal interaction with literature and media.
 - To increase awareness and appreciation of Universal Literature and how each culture reflects a separate and distinct identity.
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- **Units of study**
 - Functional writing
 - Short Stories
 - Business Writing
 - Essay Writing
 - Novel Study
 - Novel Study: *Of your Choice!**

**During this unit, the novel must be approved*

English second language

Level A2 - B1

Grammar:

- Tenses: present, future, past, present perfect, past perfect + progressive forms
- Conditionals: 1, 2 and 3
- Adjectives: comparatives, superlatives

- Adverbs
- Passive Voice
- Reported Speech
- Quantities
- Articles
- Modal verbs

Writing:

Describing people, emails, stories, postcards, filling in forms, describing places, biographies, formal and informal letters, discussing pros and cons, reviews

Listening and Reading:

Level A2 - B1

Speaking:

Discussions, role plays, group work, exchanging information, expressing opinion, agreeing and disagreeing, telling stories, comparing things

German second language

Level A1-A2

Listening (A1): understand simple sentences, phrases of everyday life

Spoken Interaction (A1): simple conversation about familiar topics; small talk

Speaking (A1): describe people in simple phrases and sentences; sounds, spelling, pronunciation

Reading (A2): able to read short texts of any genre, extract information out of texts of everyday life, understand short personal letters

Writing (A2): write short notes and personal letters

Grammar

Nouns: cases, singular, plural

Verb: present tense, modal verbs, past tenses, imperative, future

Pronouns: personal pronouns, possessive pronouns

Adjectives: declination, comparison

Article: definite, indefinite

Prepositions

Conjugations

Adverbs

Sentence: declarative, question, negation, subordinate clauses, phrases

German first language

- **Grammar**
 - Spelling
 - Word grammar, sentence grammar, text grammar
 - History of the German language
 - Registers of language
 - Functions of language
- **Writing**
 - summary, narrative writing, journalistic writing, argumentative writing, letters
- **Literature**
 - genres, types of texts (enumerate, recognise, classify, examples)
- **Speaking**
 - presentation, discussion, respectful use of language
- **Reading**
 - reading for various purposes
 - reading aloud with expression
 - reflection on one's reading habits

Spanish second language

Gramática:

- pronombres personales
- verbos regulares e irregulares en presente
- pronombres interrogativos
- artículos (definidos e indefinidos)
- hay/ser/estar
- muy/mucho, tan/tanto, poco
- también/tampoco
- gerundio
- ir a + infinitivo (“futuro próximo”)
- preposiciones de lugar
- pretérito indefinido

Temas:

- saludar, presentarse, despedirse
- deletrear
- países hispanohablantes
- describir mi casa (habitaciones + mobiliario)
- relaciones familiares /personales
- describir a personas : aspecto físico + carácter

- la ropa
- la hora + horarios
- en la tienda / en el supermercado – comprar productos
- pedir información especial
- medios de transporte
- expresar gustos y preferencias
- concertar una cita, hablar de planes
- dar consejos
- en un restaurante – pedir comida y bebida
- hablar del tiempo libre
- hablar del pasado

Physics

- SI Units, scientific notation and modelling in physics
- Kinematics: motion
apply a set of formulas on simple motion situations; sketch several types of graphs to represent simple motion situations (s-t, v-t and a-t) graphs, free fall, free fall and air resistance (Felix Baumgartner free fall analysis)
Using mobile phones, light gates and Data loggers to get a closer view into how to get quantitative information out of experiments
- Forces and Newton's laws; create free body diagrams, solve problems / calculations
- Distinguish Energy and work, Power, Force and momentum, conservation of momentum, the impulse, solve problems / calculations
- Kinetic energy and (gravitational) potential energy, other forms of energy, conservation of energy, energy transformation, solve problems / calculations

Mathematics

REAL NUMBERS

- Family tree of numbers (revision)
- Square roots (revision)
- Cube roots
- Very small and very large numbers (standard form)

ALGEBRA (revision)

- An introduction to algebra
- Simplifying algebraic expressions
 - ✓ Adding and subtracting algebraic expressions
 - ✓ Multiplying and dividing terms
 - ✓ Multiplying algebraic expressions
 - ✓ Binomial expansion
 - ✓ Factorising algebraic expressions

- ✓ Dividing algebraic expressions (by a monomial)

LINEAR EQUATIONS IN ONE VARIABLE

- Introduction (What is an equation?)
- Solving equations
- Writing equations to solve word problems
- Solving equations that contain algebraic fractions

QUADRATIC EQUATIONS

- Solving quadratic equations by completing the square
- Solving quadratic equations by using a formula
- Writing quadratic equations from a solution set
- Solving problems using quadratic equations

FUNCTIONS

- An introduction to functions
- Linear functions
 - ✓ Graph
 - ✓ Characteristics
- Non-linear functions

LINEAR SIMULTANEOUS EQUATIONS

- Using graphs to solve simultaneous equations
- Solving simultaneous equations with algebra
- Solving problems using simultaneous equations

TRIGONOMETRY

- Angular dimensions
- Pythagoras' theorem
- Trigonometric ratios (sine, cosine and tangent)
- Solving right-angled triangles
- Sine rule and cosine rule
- Solving any triangle
- Polar coordinates
- Practical applications of trigonometry

VECTORS

- Introduction
- Adding and subtracting vectors
- Multiplication of a vector by a scalar
- The scalar product

- Vector equation of a line
- Mutual position of lines
- Angle between two lines

History

ANCIENT WORLD

Greece:

- Seafaring traders – Minoans, Phoenicians
- Mycenaean Civilization
- City states Athens and Sparta
- The Persian Wars
- Democracy and Greece's Golden Age
- The Pelponnesian War
- Alexander the Great
- The Spread of Hellenistic Culture

Rome:

- Origins of Rome
- Early Roman Republic
- Rome spreads its power – Punic wars
- The Roman Empire
- Pax Romana
- The Fall of the Roman Empire
- Rome and the Roots of Western Civilization

Middle Ages:

- Migration Period
- Charlemagne Unites Germanic Kingdoms
- Feudalism in Europe
- The Age of Chivalry
- The Power of the Church
- Church Reform
- The Crusades
- Changes in Medieval Society
- Towns in the Middle Ages
- The Bubonic Plague
- The Hundred Years War

Biology

- **Cell biology:**
 - Prokaryotic and eukaryotic cells
 - Organelles in plant and animal cells

- Comparison of plant and animal cells
- The cell membrane
- Membrane transport: active and passive transport
- Mitosis and cell division
- **Human physiology:**
 - Macromolecules: proteins, carbohydrates, lipids
 - Micromolecules: vitamins, minerals
 - Healthy diet and food pyramid
 - Human digestive system and digestion
 - Blood circulatory system and heart
 - Respiratory system
- **Classification and biodiversity:**
 - Kingdoms of living organisms
 - Classifying living organisms
 - Characteristics of organisms
 - Viruses and fungi
 - Microorganisms
- **Plant biology:**
 - Flowering plants
 - Plant reproduction
 - Photosynthesis and cell respiration
 - Transport in xylem and phloem

Geography

A limited social, economic and ecologic world

Population and Society

- density and distribution
- growth and structure
- the demographic transition model
- migration (migrants, immigrants, emigrants, refugees)
- causes and effects of migration
- types of migration

Resources and Regional Conflicts

- Environmental resources conflict
- distribution and use of natural resources (regional examples)
- non-renewable resources – renewable resources
- conflicts based on exploitation
- regional conflicts, political interests
- natural phenomena/natural disasters and their effects and consequences on different regions

Economic needs

- markets: supply, demand, prices
- distribution of goods
- economic differences in distribution and availability of production factors (soil, labour, capital, and human resources)
- political and regional consequences

Equality and Diversity in Europe**Structure of Europe**

- different concepts of structuring (cultural, political, economical, natural)
- European integration processes (effects and consequences)

Change in production places and areas (socioeconomic difficulties)

- agriculture (dependence on nature/environment)
- nature vs. development of tourism

Convergences and divergences of European societies

- Development of European society
- Realising own future plans
- Immigration

Religion (Roman Catholic)**WONDERS IN THE BIBLE AND TODAY****HUMAN RIGHTS**

- Biblical origin of human rights

THE SACRAMENTS

- Signs and symbols
- The seven sacraments
- Confirmation

THE HIERARCHICAL STRUCTURE OF THE CHURCH**SEARCHING FOR MEANING IN LIFE****WORLD RELIGIONS**

- Christianity
- Islam
- Jewish religion

LENT

- What is conscience?
- Various explanations of the term conscience
- Conscience, sin and repentance
- The passion of Jesus Christ

RELIGION

- Understanding the phenomenon – Religion

CHANGES AND DEVELOPMENTS IN THE CHURCH

- 2000 years
- Architectural structures in the church

I.T.

- Basics of text processing
- Basics of spreadsheet processing
- Presentation and presentation techniques
- Basics of programming (using SCRATCH)
- Basics of hardware
- Internet security, copyright
- Create simple applications in scratch by performing Stop motion photography

Visual Arts**Design:**

- Graphic design (basics, examples, practical works)
- Logo design (basics, examples, creating an own logo)
- Type art (basics, examples, working with different kinds of types, using type art for creating a picture, creating a new font, letters become sculptures)

Drawing:

- Basics and possibilities regarding the use of pencils and graphical pens
- Creating of shadows and grayscales using pencils and graphical pens
- 3D figures and shapes,
- Study of nature

Architecture:

- Basics, examples and possibilities of building houses and the main periods of art history
- Examples of architecture in the 20th century regarding the subject field of „social housing“ and „public buildings“,
- Practical works of planning

Art-history:

- Study of nature (examples and different kinds of possibilities in the history),
- Life and work of an artist in the baroque-age on the example of Jan Vermeer,
- The „three main colors“ (red, blue, yellow) and their meaning in the art-history (examples),
- Optical illusions,
- Film history (the film in the age of expressionism)

Music**Introduction to musical styles**

- History of rap
- Hip-hop styles

Traditional Austrian songs**Basic exercises for the human voice****Reading notes in various clefs**

- Depicting melodies through notes

Project Haydn

- Chronological overview of musical history
- Biography and his time
- Symphony No. 94 – ‚Surprise Symphony‘

Appreciation of contemporary music**Basic musical theory**

- Major scales
- Minor scales
- Intervals

Sound and function of instruments

- Musical instruments
- Historical overview: orchestra instruments

Basic musical theory

- Circle of Fifths

Christmas songs of different cultural backgrounds**Traditional Viennese songs****Franz Schubert: biography and his time**

- Chronological overview of musical history
- Selection of songs by Franz Schubert; Scoring of poems

- Introduction to Jazz

Introduction to Jazz

Transforming rhythm into physical movement – dance

- Learning a ‚Schuhplattler‘

Introduction to gospel music

- Singing of chorals

Combining language, rhythm, sound and movement

- Dancing: Historical development

Physical Education

Basic movement skills

- Mobility
- Core stability
- Flexibility
- Leg axis stability
- Sensomotoric training
- Running techniques
- Jumping techniques
- Coordinative skills (e.g. hand-eye coordination)
- Aerobic endurance
- Strength
- Quickness
- Hockey-specific off-ice activities
- Trend sports

Sports specific skills

- Athletics
- Gymnastics
- Ball games
- Swimming

Methodological competence

- General and sports specific warm-up and cool-down
- Refereeing, tactics, playing by the rules
- Health: anatomical basics: activation, muscles
- Regeneration measures
 - Foam rolling
 - Stretching
 - Muscle relaxation techniques
- Safety measures

Social competences

- Needs, interests and aims: personal vs. group
- Self-observation and observation of others

Self-competence

- Self-assessment
- Analysis of strengths and weaknesses concerning personal behavior patterns
- Articulation of needs, interests and aims of movement
- Feedback methods