DEEDS

Intellectual Output 1

STUDY PLAN MODEL

Co-funded by the
Erasmus+ Programme
of the European Union

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THE DEEDS PROJECT

The Project DEEDS - MODELLING A EUROPEAN CROSS-CURRICULAR STUDY PROGRAMME FOR UPPER SECONDARY SCHOOLS, co-financed by the Erasmus + programme, (2020-2023) aims to actively contribute to the construction of the European Education Area through the development of a model of European exchange and study programme among general upper secondary schools.

In order to achieve the general objective above the project will aim at:

1. To develop and test a joint transnational curriculum/programme among the involved schools;
2. To identify a set of common assessment and certification methods tailored to the acquired competences and skills;
3. To build organisational capacity in upper secondary schools through the identification and the solution of administrative/management problems pertaining long term transnational mobility of pupils.

The project involves five partners from four European countries: SERN - Sweden Emilia Romagna Network (IT), Liceo Statale Aldo Moro - Reggio Emilia (IT), Folkungaskolan - Linköping (SE), Scuola Italiana Madrid (ES), Center for the Advancement of Research and Development in Educational Technology - CARDET (CY)

During the 3 years of the project, the partnership will develop four products, called Intellectual Outputs (IOs):

1. THE STUDY PLAN MODEL, Intellectual Output 1 (IO1): a transnational study plan based on common subjects and shared contents in each discipline;
2. SET OF ASSESSMENT TOOLS, Intellectual Output 2 (IO2): a set of tools to be employed by the participating schools in the framework of the joint study programme to assess the notions and skills acquired by the students during the mobility periods;
3. ADMINISTRATIVE AND ORGANISATIONAL PACKAGE, Intellectual Output 3 (IO3): a package built along four areas to ensure a smooth management to ensure a smooth implementation of the activities and structure a two-year programme at transnational level: internal management processes, procedures for outgoing and incoming mobilities and finally procedures for the recognition of the experience.
4. ONLINE TRAINING COURSE FOR SCHOOL STAFF, Intellectual Output 4 (IO4): a learning pathway for teachers and school staff explaining how to use the IOs, also focusing on crucial elements emerged during the process such as the lesson learned.

All the materials developed during the project by the partners are available on the project website www.deedsproject.eu even upon completion of the project itself.

The material of this publication is the result of one and a half years of work carried out by the project partnership and the teachers of the three schools involved.

1- METHODOLOGY OF THE STUDY PLAN MODEL

The aim of the methodology is to explain what and how the data collection for the study plan model was done in order for the reader to evaluate the reliability and validity of the study plan. More specifically, the aim of the Study Plan Model (Intellectual Output 1; IO1) is to develop a joint study programmed on a transnational level for the students in Europe.

According to the proposal, the study plan should include the core subjects which will be studied in the programme, a set of topics for each subject which will be included in the study plan, common learning objectives for each subject, and common skills which will be gained by the students by the end of the programme. The study plan for each country partner was proposed to be divided into three sections.

The first section includes an introductory text which consists of the national curricula of the country partner and the way the curricula was implemented and how the study programme was integrated in each school content, national programme and school educational offer. In the first section, partners referred to the European policy context, which was fully aligned with ET 2020 and E+ 21-27 strategic priorities. The second section refers to the identification of the subject which is taught in different partner countries in relation to the common learning objectives. Lastly, the third section is based on the set of topics which were implemented in the programme. A preliminary set of topics was identified (e.g., English, 1-2 language lessons, Mathematics, Science, Physics, History of arts, Geography, and History).

In order to identify the above mentioned needs and develop them according to the set structure, the first action was for the consortium to define in detail the content of the sections of the study plan. For example, for each subject, the key features of the education system are mentioned. The key features are based on four pillars; how the schools are governed, who are the providers of the education system, a timeline of an academic year and programme duration stages, and the level of inclusion. Additionally, partners included more specific information in regards to the upper secondary education of each country.

Afterwards, each partner chose the teachers who will be participating in the thematic working groups (i.e., English, 1-2 language lessons, Mathematics, Science, Physics, History of arts, Geography, and History) and presented the project. Then, Folkungaskolan and SERN created a template using Google Forms which was sent to all teachers to complete with all the information and material on a local level. The required information was the:

- description of the subject
- aim of each subject,
- main learning objectives of the subject
- requirements of completing each subject, including the name of the modules and time needed

At the first training seminar in Italy, a presentation of the material was shown to all teachers where they had the opportunity to get their questions answered. Additionally, all the teachers from all the partner countries grouped together based on the subject they teach. After the first training seminar, the teachers continue their collaboration via online meetings to distribute their work and create the learning objectives for their subject.

After the data collection of the teachers' responses, a draft version of the study plan including section 1 and 2 was prepared by Folkungaskolan and Scuola Italiana Madrid. All the partners created a comparative analysis between the national curricula of all the countries which are taking part in the programme. At the second training seminar in Spain, the draft version of the study plan was presented to the teachers where they had the opportunity to discuss and give feedback in order to finalize the first two sections of the study plan. What is more, teachers started working on section 3, where they had to create an interdisciplinary curriculum based on their subject, under the supervision of Liceo Moro.

The third section was finalized in the third coordination meeting in Cyprus which was tested during the mobility of the students. Selected students from the participating schools in Spain, Italy, and Sweden followed the shared content created by the teachers, in Italy and Sweden at Liceo Moro and Folkungaskolan (i.e., hosting schools). Partners gave an evaluation questionnaire to the teachers and students in the programme to verify if students assimilated what the learning objectives (section 2) suggested of the discipline-related contents (section 3).

2. EU POLICY FRAMEWORK

The DEEDS project is nested in an evolving policy framework at European Union (EU) level. Student mobility on the one hand and the recognition of the periods spent abroad by the students have been one key elements at the center of the EU policies and programmes in the field of education which have been unfolding over the past 40 years. A great deal has been achieved in the field of Higher Education where the Erasmus Programme and other initiatives such as the Bologna Agreement and more recently the European University initiative have, and are still, providing policy ground upon which constructing a strong European (Higher) Education Area.

Despite Article 165 of the Treaty on the Functioning of the European Union (TFEU)[1] points out that the Union shall be "encouraging mobility of students and teachers, by encouraging inter alia, the academic recognition of diplomas and periods of study" much remains to be done when it comes to upper secondary education.
Contrary to the higher education sector, long-term mobility of students among upper secondary schools is still a quantitative marginal phenomenon. The main reasons of this do not stand only in language-related or financial obstacles but also in the fact that there is no a clear and somehow standardised path for the recognition of what has been learnt and of the skills acquired during the period the students spend in another school of the EU. At the same time, a long-term stay is posing administrative and organisational challenges both for the sending and hosting schools and so far, this has also been a relevant obstacle to long-term mobility.

From a policy point of view it should be noted that EU Council has adopted in late 2018 a Recommendation on promoting[2] automatic mutual recognition of higher education and upper secondary education and training qualifications and the outcomes of learning periods abroad. This policy document has set the basis for an enhanced cooperation among the member states on the theme of mobility for upper secondary schools in the EU but most importantly it has been an important milestone for the development of the strategic document drafted by the Commission, and adopted in late 2020, for the creation of the European Education Area by 2025. This ambitious strategy is based on the freedom for learners and teachers to learn and work across the continent and for institutions to freely associate with one another in Europe and beyond.

The main policy instrument that the EU will employ to achieve the objectives set out in its strategic vision, geared towards the achievement of a European Education Area, will be the Erasmus+ 21-27 Programme. In the framework of the programme long-term mobility will be a more and more standard option also in the school education sector[3]. Erasmus+ will be a key tool at disposal of upper secondary schools to start experimenting and mainstreaming mobilities (and exchanges) for students and staff in radically new perspective. Mobility is not only expected strengthen the European dimension at school level, but it will be a leverage to deliver quality education through a new approach to teacher's training and innovation introduced in relation to language learning, cultural diversity management as well aspects pertaining the green and digital transitions in the context of the school educations sector.

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[1] Treaty on the Functioning of the European Union https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN

[2] EU Council, Council Recommendation, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H1210(01)&from=EN

[3] European Commission, Achieving the European Education Area by 2025, Communication, COM(2020) 625 final, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0625&qid=1615995098709&from=EN

3. NATIONAL EDUCATION SYSTEMS [4]

KEY FEATURES OF THE ITALIAN EDUCATION SYSTEM

GOVERNANCE. The education system is organised according to the principles of subsidiarity and of autonomy of institutions. The State has exclusive legislative competences on the general organisation of the education system (e.g. minimum standards of education, school staff, quality assurance, State financial resources). The Ministry of Education and the Ministry of University and are responsible for the general administration of education at national level for the relevant fields, respectively. The Ministry of education has decentralised offices (Regional School Offices – USRs) that guarantee the application of general provisions and the respect of the minimum performance requirements and of standards in each Region. Regions have joint responsibility with the State in some sectors of the education system (e.g. organisation of ECEC (0-3), school calendar, distribution of schools in their territory, right to study at higher level). Regions have exclusive legislative competence in the organisation of the regional vocational education and training system.
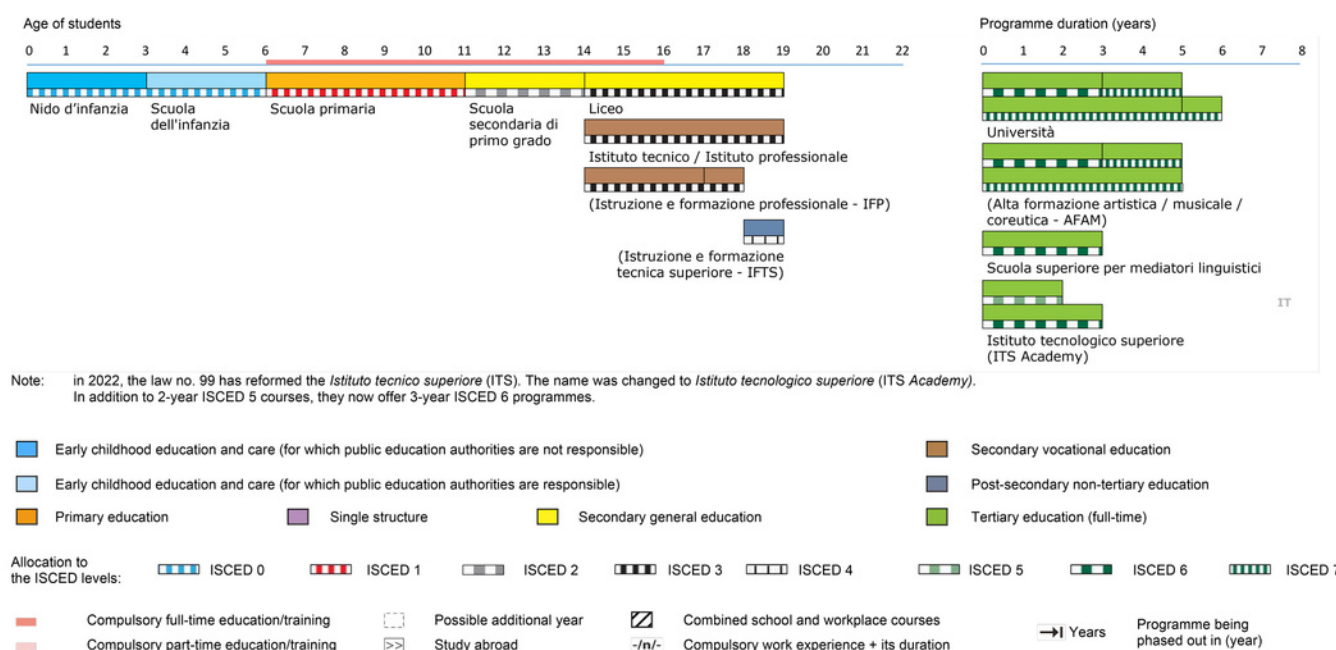
Local authorities organise the offer (e.g. maintenance of premises, merging or establishment of schools, transport of pupils) from ECEC to upper secondary education at local level. Schools have a high degree of autonomy: they define curricula, widen the educational offer, organise teaching (school time and groups of pupils). Every three years, schools draw up their own 'three-year educational offer plan' (Piano triennale dell'offerta formativa). At higher education level, universities and institutions of Higher education for the fine arts, music and dance (Alta formazione artistica, musicale e coreutica – Afam) have statutory, regulatory, teaching and organisational autonomy.

PROVIDERS. The Italian education system is mainly a public State system. However, private subjects and public bodies can establish education institutions. Such non-State schools can be either equal to State schools (called scuole paritarie) or merely private schools. These latter cannot issue qualifications. The State directly finances State schools. Scuole paritarie receive State contributions according to criteria established annually by the Ministry of education and can be run by public bodies, usually local authorities, as well as by private subjects.

INCLUSION. Education at all levels must be open to everyone: Italian citizens as well as foreigner minors from both EU and non-EU countries. Compulsory education is free. The principle of inclusion also applies to pupils with disabilities, to pupils with social and economic disadvantages and to immigrant pupils. In such circumstances, measures focus on personalization and didactic flexibility and, in the case of immigrants with low levels of Italian, on linguistic support. The State also guarantees the right to education to pupils/students who are unable to attend school because hospitalised, detained or at home for a long illness.

STAGES

Italy – 2022/2023

Note: in 2022, the law no. 99 has reformed the *Istituto tecnico superiore* (ITS). The name was changed to *Istituto tecnologico superiore* (ITS *Academy*). In addition to 2-year ISCED 5 courses, they now offer 3-year ISCED 6 programmes.

Source: Eurydice.

[4] Eurydice, National Education Systems, https://eacea.ec.europa.eu/national-policies/eurydice/national-description_en

SECONDARY EDUCATION. Secondary education is made up of the following two levels of education:

- the 'first-level secondary school' (*scuola secondaria di I grado*) corresponding to the lower secondary level (ISCED 2);
- the 'second cycle of education' (*secondo ciclo di istruzione*), which corresponds to the upper secondary level (ISCED 3). It starts at the age of 14 and offers two different pathways:
  - » The upper secondary school education (*scuola secondaria di II grado*) offers both general (*liceo*) and vocational (technical and vocational) programmes. Courses last 5 years. At the end of the upper secondary school education, students who successfully pass the final exam, receive a certificate that gives them access to higher education ;
  - » The regional vocational training system (IFP) offers three or four-year courses organised by accredited training agencies or by upper secondary schools. At the end of regional courses, learners receive a qualification that gives them access to second-level regional vocational courses or, under certain conditions, short-cycle courses at higher education level.

General upper secondary education is delivered by six types of general schools (*licei*) specializing in the following areas: arts (*liceo artistico*), classical studies (*liceo classico*), sciences (liceo scientifico), languages (*liceo linguistico*), music and dance (*liceo musicale e coreutico*), human sciences (*liceo delle scienze umane*). It aims at preparing students to higher-level studies and to the labour world by providing them with adequate competences and knowledge, as well as cultural and methodological instruments for developing their own life skills, i.e. critical thinking and planning skills.

The first two years of upper secondary education, whether undertaken in a general or vocational school, are compulsory. Thus, in order to ensure equal education to all students, the Ministry has defined the knowledge and competences that all students are expected to have acquired on completion of compulsory education. Knowledge and competences integrate the current upper secondary curricula, specific for each type of school. Knowledge and competences are organised into 4 'cultural areas': languages, mathematics, science/technology and history/social studies. Knowledge and competences are also the basis for building learning pathways aimed at acquiring key competences that can help students in adulthood and for lifelong learning. Key competences are: learning to learn, planning, communicating, collaborating and participating, acting autonomously, problem solving, creating connections and relations, acquiring and interpreting information.

The five years of general upper secondary education are organised, for teaching purposes only, into two cycles of two years and a final fifth year. The purpose of the first two years is to deepen and develop the knowledge, competences and skills acquired by students in the first cycle of education. Knowledge, competences and skills are further developed in the second two-year period. In the fifth year, students are expected to have fully reached the specific learning objectives foreseen by the relevant curriculum for each branch of studies.

Curricula in general upper secondary education, are defined in specific National Guidelines for licei (*Indicazioni nazionali per i licei*) issued in 2010 (DM 211/2010). The National Guidelines set out the specific learning objectives for each type of *liceo*. For each subject, specific learning objectives describe knowledge and skills that students are expected to acquire as the basis for building their own competences. The National Guidelines also include the student's Educational, cultural and professional profile representing what a student should know and should be able to do at the end of each branch of *liceo*.

KEY FEATURES OF THE SWEDISH EDUCATION SYSTEM

Sweden has a decentralised education system, steered by goals and learning outcomes defined at central level. The government has the overall responsibility and sets the framework for education at all levels.

Municipalities (kommuner) in Sweden are responsible for organising education within:

- preschool (förskola)
- preschool class (förskoleklass)
- compulsory school (grundskola)
- upper secondary school (gymnasieskola)
- municipal adult education (kommunal vuxenutbildning, Komvux)
- Swedish tuition for immigrants (svenskaundervisning för invandrare, sfi)
- leisure-time centres (fritidshem)

The major part of school funding on those levels, including grant-aided independent schools (fristående skolor), comes from municipal tax revenues. Grant-aided independent schools are open to all and follow the same curricula as municipal schools do.

The national school system is governed by the Education Act (Skollag, 2010:800), decided by the Parliament (riksdagen). The Education Act contains general regulations for all types of schools. The national curriculum, adopted by the government, sets out the tasks and overall objectives of upper secondary education, as well as the values that form the basis of teaching. The parliament decides on the upper secondary programmes and which subjects that are to be common core subjects. The government sets out the programme goals, specifying the purpose and objectives of each national programme. The National Agency for Education (Skolverket) adopts syllabi. The syllabi sets out the goals of teaching for each individual subject and course.

The compulsory school system comprises compulsory school (grundskolan), the Sami school (sameskolan) for Sami-speaking children who live in the north of the country, schools for pupils with impaired hearing (specialskolan), and education for pupils with learning disabilities (grundsärskolan).

Municipalities are obliged to arrange preschool classes (förskoleklass) for all children six years of age. Participation in the preschool class is mandatory.

Under the Education Act, nine years of compulsory schooling is obligatory for all children aged 7 to 16, i.e. school attendance is compulsory. The Education Act also states that children and young people have a right to receive education in the national school system.

STAGES

Source: Eurydice.
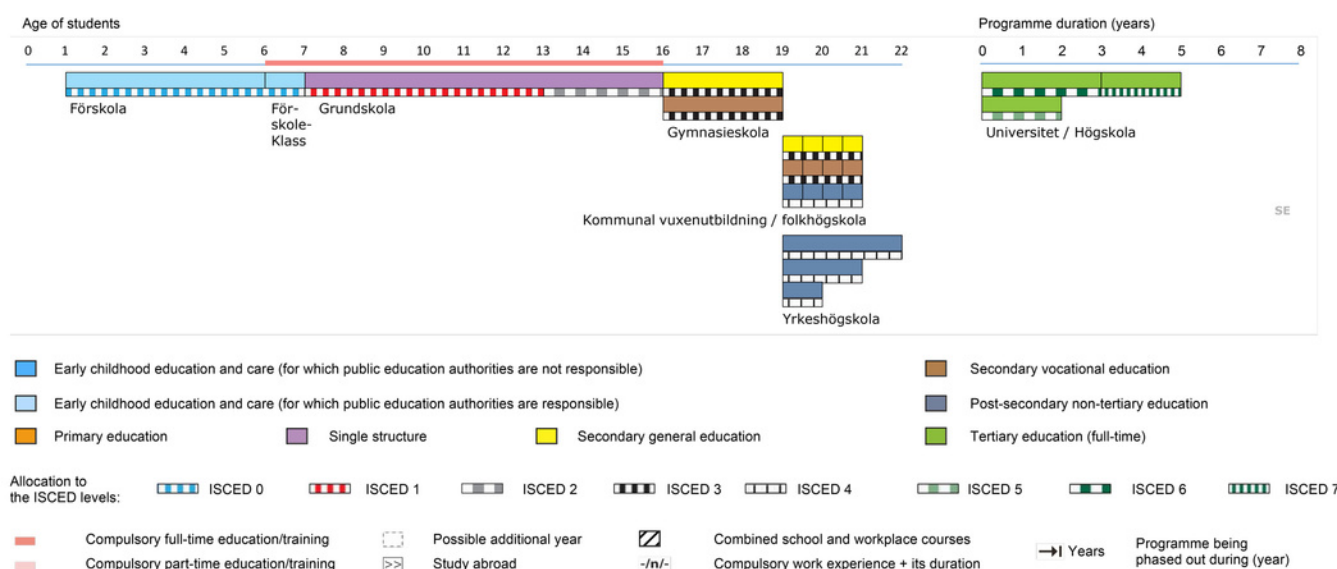
UPPER SECONDARY EDUCATION

Upper secondary schools may be run by municipalities or by independent organisers such as grant-aided independent schools. Upper secondary education is free of charge for pupils. Independent schools at upper secondary level are generally grant-aided and are not allowed to charge fees as opposed to private schools.

The current structure for the upper secondary school (gymnasieskolan) was introduced 1 July 2011. The upper secondary school consists of different types of programmes:

18 national programmes (nationellt program) each lasting three years, 12 of which are vocational programmes (högskoleförberedande program) and six of which are preparatory programmes for higher education. The preparatory programmes for higher education provide basic eligibility for further studies within higher education at undergraduate level. Pupils in vocational programmes can obtain eligibility for higher education by studying a few extra courses. The programmes are divided into upper secondary foundation subjects, subjects common to a programme, orientations, programme specialisations and a diploma project.

There are also five introductory programmes for pupils who are not eligible for a national programme.

All the upper secondary school programmes are designed around the same eight compulsory subjects, called core subjects (gymnasiegemensamma ämnen): Physical education and Health, Swedish (or Swedish as a second language), English, History, Social studies, Religion, Mathematics and Science studies.

In addition to the upper secondary foundation subjects pupils study what is nationally referred to as programme specific subjects (programgemensamma ämnen), i.e. subjects that are specific to a chosen programme. General and vocational branches are provided within the same institutions. Education is given on a full-time basis.

Upper secondary school is not divided into courses for specific years and is regulated by a national system of points for the whole three year programme. The education system is decentralised and the education is governed by the Education Act decided by the Parliament, by the national goals for education – set in the Curriculum for the upper secondary school, by the programme goals – specific for each programme, and by each subject's syllabus.

KEY FEATURES OF THE SPANISH EDUCATION SYSTEM

GOVERNANCE. Spain has a decentralised education system.

The educational powers are shared between the State General Authority (Ministry of Education and Vocational Training, Ministry of Science, Innovation and Universities, and Ministry of Culture and Sport) and the Autonomous Communities (Regional Ministries or Departments of Education).

- the central education administration executes the general guidelines of the Government on education policy and regulates the basic elements or aspects of the system;
- regional education authorities develop the State regulations and have executive and administrative competences for managing the education system in their own territory.

Basic education is compulsory and free in publicly-funded schools, it lasts ten years and it is divided into two stages:

- Primary education, provided in primary schools. It covers six academic years, usually studied between the ages of 6 and 12;
- Compulsory secondary education, studied in secondary schools, between the ages of 12 and 16. At the end of this stage, students receive the first official certificate, the Lower Compulsory Secondary Education Certificate, which allows them to have access to upper secondary education or the world of work.

PROVIDERS. Individuals and legal entities are free to create educational institutions, subject to observance of the constitutional principles.

Types of non-university educational institutions according to their ownership and source of funding:
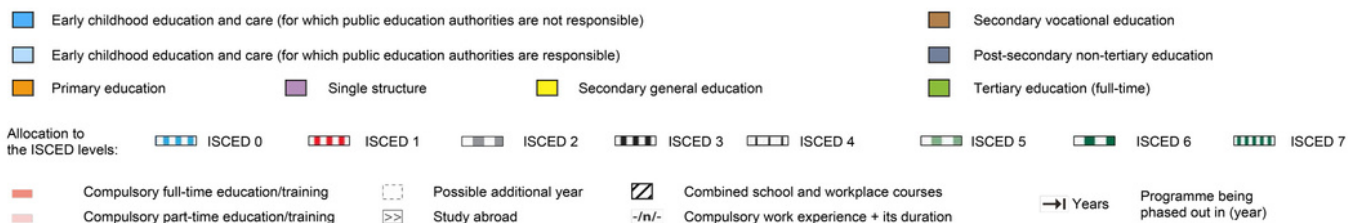
- public schools: they are owned by the education authority and publicly-funded
- private schools: they are privately owned and privately-funded
- publicly-funded private schools: ownership is private but they can be publicly-funded through a regime of agreements.

STAGES

Spain – 2022/2023
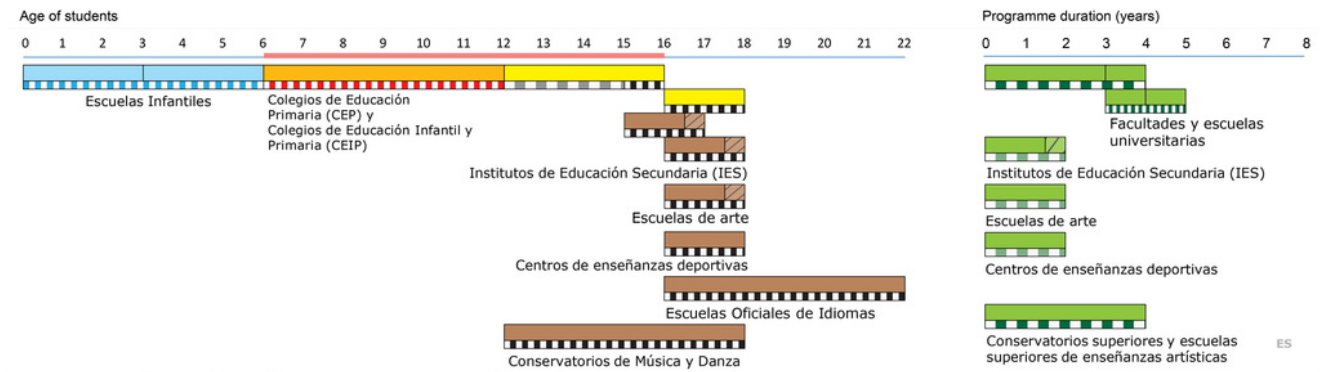
Note: *Escuelas oficiales de idiomas* offer language courses that may last for 11 years.
Some of the education provision of *Conservatorios* can be recognised/validated in full-time mainstream education programmes, such as *Bachillerato artístico* at upper secondary education.

- Early childhood education and care (for which public education authorities are not responsible)
- Early childhood education and care (for which public education authorities are responsible)
- Primary education
- Single structure
- Secondary general education
- Secondary vocational education
- Post-secondary non-tertiary education
- Tertiary education (full-time)

Allocation to the ISCED levels: ISCED 0 | ISCED 1 | ISCED 2 | ISCED 3 | ISCED 4 | ISCED 5 | ISCED 6 | ISCED 7

- Compulsory full-time education/training
- Compulsory part-time education/training
- Possible additional year
- Study abroad
- Combined school and workplace courses
- -/n/- Compulsory work experience + its duration
- →I Years
- Programme being phased out in (year)

Source: Eurydice.

UPPER SECONDARY EDUCATION

The educational provision of secondary and post-secondary non-tertiary education is regulated by the 2006 Education Act and the 2013 Act on the Improvement of the Quality of Education, which modifies the former.

General upper secondary education (ISCED 3) in Spain comprises the 4th year of compulsory secondary education and the two years of Bachillerato.

Bachillerato is structured into three branches, comprises two academic years and its curriculum is organised into three sets of subjects: core subjects, specific subjects and subjects that are freely structured by the Autonomous Communities.

Bachillerato is flexibly organised in order to provide specialised training in line with the expectations and training interests of students, while enabling them to participate in working life once they have successfully completed it. Its branches are: Sciences, Arts, Humanities and Social Sciences Arts.

The purpose of Bachillerato is to:

- provide students with intellectual and humane education, as well as the knowledge and skills through which they may develop the social functions and actively participate in life with responsibility and competence;
- enable them to have access to higher education.

4. PARTICIPATING SCHOOLS

FOLKUNGASKOLAN

SCUOLA ITALIANA MADRID

LICEO SCIENTIFICO STATALE "ALDO MORO"

LICEO SCIENTIFICO STATALE "ALDO MORO"

Reggio Emilia - Italy

Liceo Aldo Moro is a large upper-secondary State school with about 1,600 students, 120 teaching staff and 30 administrative/janitor staff. The school is positioned near the centre of Reggio Emilia, a middle-size city of about 160,000 residents, also a university city. About 50% of our families commute from neighbouring towns or smaller communities.

The Italian system of the Licei (academic-style schools, meant to be preparatory for University) offers courses focused on students' different options: languages, science and applied science, classical, artistic, social sciences, and others. Liceo Moro has (1) and (2), plus extra options (Maths Empowerment and a second language) for the Science curriculum and an ESABAC option for the French language courses.

Our mission on a cognitive level is to provide good background preparation in all subjects for future university students, and on the civil level to educate youths to become good citizens and active, prosocial members of modern Italian and European society. Classes generally run from 8 am to 1 pm from Monday to Saturday (with breaks). The traditional idea of a Liceo education was focused on individual work done at home by each student. Being required standards rather high, individual study hours tend to be long. This said, Liceo Moro offers plenty of extra-curricular opportunities in sports, art, theatre, civic education, community service. Like other Italian schools we have been committed to reach maximum inclusion. Giant progress has been done in this area, and much has to be done.

Since its foundation back in 1975 Liceo Moro has been moving in a perspective of curricular and methodological innovation, with several national and transnational projects concerning the areas of science, humanities, and active citizenship. As members or leaders of networks in these areas, we have been cooperating with universities and other post-secondary education agencies operating in our territory.

Our expertise on projects has recently allowed us to set up quality options for inclusion, sustainable practices and cross-curricular competences. As teachers, we share a well-established culture of integration, attention towards stakeholders and collective decision-making.

At the moment we are working at re-thinking and innovating our teaching practices in several curricular areas to meet the new cultural and educational challenges of contemporary society. The Erasmus+ projects we currently partner in are expected to widen our international expertise with a shared competence in the planning and implementation of multi-national programmes, in order to consolidate the idea of European citizenship at all levels of our educational process.

We share with the City of Reggio Emilia a mindset oriented to opening our perspectives to transnational cooperation and sustainable practices, to provide our students the necessary tools for their European future keeping in sight the values of solidarity and cooperation which have inspired and contributed to design our present.

A few examples of our prize-winning projects:

La Città del Lettore (The City of Readers).
To promote reading as a formative practice, every end of May the school premises change into a strange city where medicine, food and travelling are made entirely from books and stories. More than 300 students and 20 teachers are involved in the giant open-air theatre performance which hosts families, friends and citizens of Reggio Emilia, sometimes storming the city centre as well, for 4 successive evenings.

Nonno Bit (Grandpa's Bytes).
The Municipality of Reggio Emilia is dedicated to improving life standards for the elderly. Our Applied Science nerds and problem solvers come up with an idea to participate: what about teaching people in their seventies and eighties to use computers? The project has recently come to include people with special abilities too. Wonderful training for volunteering and social/community work.

FOLKUNGASKOLAN

📍 **Linköping - Sweden**

Folkunga is an upper secondary high school in Linkoping, Sweden. The school was built in 1914. The school has educated pupils for over 100 years. The school has about 1500 pupils. Around 720 attend the compulsory school (age 10-16). The upper secondary school holds 780 students (age 16-19). Staff employed around 170. The school is situated in the city of Linkoping which has around 160000 residents. Linköping has a university which harbours around 23000 students.

Folkungaskolan aims to prepare its upper secondary students for university studies or other studies at a higher level. The students study courses such as Maths, Science, Languages, Business, Law, Civics, English, History, Swedish, Swedish as a Second Language, Psychology, Religion and Physical Education as a base.

Students can add 3-4 courses apart from the basic range of courses like Criminology or Leadership etc.

The time spent at Folkunga is valuable, it is about our students' future. Our aim is to give the best possible education when attending Folkungaskolan. Knowledge will open many boundaries, break walls and create new options. In order to achieve all this, we have teachers who work effortlessly in order to enhance our students' development and give them tools so they can analyse and ask the right questions from a scientific basis.

Our teachers take pride in their professional skills and work together with their colleagues in order to develop their pedagogical skills.

We also think that it is important to raise the students' awareness of the society outside the classroom. We will give our students the possibility to make contacts with local business, Universities, international exchange, different organisations and so on (networking).

A very good example of this is our course in Entrepreneurship. Folkungaskolan has won numerous prizes and is nominated each and every year to take part in the Swedish National Games in Entrepreneurship. This year we have four students nominated. They run a company called EGGSPERT (they deliver organic eggs to their customers).

SCUOLA ITALIANA MADRID

Madrid- Spain

The Scuola Italiana Statale in Madrid is an institution established in 1940 with a bilateral agreement among Italy and Spain. After the World War it went on pursuing its main aim that is promotion of Italian language and culture, with a full integration in its educational plan of the two main cultural elements, Spanish and Italian, in a frame of tolerance, democracy, respect of any culture, plurilingualism, creative and innovative teaching methods.

There are 4 school levels, all in the same building:

- Pre primary school, that is attended by children from 3 to 5 years old ;
- Primary school, with around 400 pupils from 6 to 11 years old;
- Lower secondary school, (scuola media) with around 180 pupils;
- High school – Liceo, with 180 students.

The majority of the students are born in Spain; many families are mixed and we have a significant number of students from Spanish families who have no parent with Italian nationality. All the students are bilingual, perfectly managing Spanish and Italian. The curriculum of the upper secondary is based on Italian National " Indicazioni Nazionali" with a strong integration of Spanish language, with an integrated Spanish curriculum starting from the first year of primary to the end of the fourth year of Liceo.

From 2021-2022 school year, the high school will keep its general curricula, but with the introduction of sections with a slight orientation in science, informatics and humanistic, therefore proposing a more diversified educational offer.

It is fully recognised as educational institution in Spain, and students are well accepted in the Spanish universities, where they have a high rate of success. Students attend their lessons between 8.15 and 15.15 from Monday to Friday.

It is a fully bilingual school, with a strong European dimension. It promotes exchanges and projects with other European and international schools, participating in different Erasmus projects at all levels of school, from primary to high school and has been awarded for two years with the eTwinning school label.

The school has strong links with Italian Embassy and works together with the Istituto di Cultura Italiana to promote Italian culture and language in Madrid area. In the mean time it collaborates actively with Spanish schools and institutions. Students participate in various national and international events and competition, like the "Fin de semana científico" (scientific exhibition gathering hundreds of school from the whole Spain), the "Italian Olympic games for mathematics", the social theatre project "Monólogos Pandémicos" of the Complutense university of Madrid and the Educational theatre festival "Il Gerione" in Italy.

In the afternoon there are several extra activities hosted in the school building, concerning sports, theatre, music, web-journalism (with a group of students managing the blog https://scuolaitalianamadrid.news.blog/). In the near future there are language courses (English and Italian) and the school will have the authority to certify the knowledge of Italian Language. The school is situated in a central residential area of the city, Chamberi, in a big beautiful, even quite old, building. Around the school there are several museums, like Museo Sorolla and Natural Science Museum, and a little bit farther, Museo del Prado and Museo Reina Sofia. The school promotes for the students visits to art museums and outdoor activities in the parks in Madrid or in the surrounding mountainous areas

4. SUBJECTS OF THE STUDY PLAN

MATHEMATICS

SCIENCE

HISTORY

PHILOSOPHY

ENGLISH

SPANISH

HISTORY OF ART

PHYSICAL EDUCATION

INTRODUCTION

The subjects included in the programme

The subjects illustrated below are those that the three schools have identified as common in the Curricula and Programme of studies regularly carried out.

Each of the following sub-sections include a common introduction to the subject and a comparative analysis of the curricula, the learning objectives and a set of modules addressing topics jointly agreed by the teachers of that specific subject/course. The modules have been designed to be implemented over a 12-week-period and in a pre-deteremined number of hours. The contents of the study plan will be assessed by the teachers of the hosting schools according to the common criteria identified with the colleagues of the other countries and outlined.

It should be noted that as for the subject" "Science, although present in the Curriculum of the three participating schools, it was not included among the subjects covered during the testing period due to substantial organisational differences.

The subjects not covered by the programme

The subjects not covered by the study programme are: Italian, Swedish, Latin, French....

In order to ensure didactic continuity during the period spent abroad by the students, for each subject a number of online lessons will be organised by the sending school. The lessons will be scheduled in accordance with the daily timetable that the students will have to follow in the subjects covered by the Programme.

The steps to be followed in preparation of such activities are the following:

1. The teacher(s) of the sending school responsible for the subject(s)/course(s) not covered by the Programme will be contacted by the Committee of the school in charge of managing the mobility programme, and will be informed about the aims and subjects covered during the mobility period;
2. The teacher(s) identifies the core contents that will have to be addressed during the remote learning sessions including possible assessment methods to be applied, and the number of hours necessary to carry out the activities.
3. Once the information about the number of hours necessary for each subject is collected, the hosting school includes them into the weekly timetable of the student(s).

For more information about the preparation of the mobility activities please refer to the Administrative and Organisational Package.

4. 1 MATHEMATICS
NATIONAL CURRICULA
Swedish National Curriculum - Folkungaskolan

Mathematics has a history stretching back many thousands of years with contributions from many cultures. It has developed not only out of practical necessity, but also as a result of people's curiosity and desire to explore mathematics as an end in itself. Communication using the language of mathematics is similar all over the world. As information technology develops mathematics is being used in increasingly complex situations. Mathematics is also a tool in science and different professions. Ultimately mathematics is about discovering patterns and formulating general relationships.

Aim of the subject. Teaching in mathematics should aim at students developing their ability to work mathematically. This involves developing an understanding of mathematical concepts and methods, as well as different strategies for solving mathematical problems and using mathematics in social and professional situations. Teaching should give students the opportunity to challenge, deepen and broaden their creativity and mathematical skills. In addition, it should contribute to students developing the ability to apply mathematics in different contexts, and understand its importance for the individual and society. Teaching should cover a variety of working forms and methods of working, where investigative activities form a part. Where appropriate, teaching should take place in environments that are relevant and closely related to praxis. Teaching should give students the opportunity to communicate using different forms of expression. In addition, it should provide students with challenges, as well as experience in the logic, generalisability, creative qualities and multifaceted nature of mathematics. Teaching should strengthen students' confidence in their ability to use mathematics in different contexts, and provide scope for problem solving both as a goal and an instrument. Teaching should also give students the opportunity to develop their ability to use digital technology, digital media, and other tools which can occur in subjects typical of programmes.

Teaching in mathematics should give students the opportunity to develop their ability to:
1. use and describe the meaning of mathematical concepts and their inter-relationships.
2. manage procedures and solve tasks of a standard nature with and without tools.
3. formulate, analyse and solve mathematical problems, and assess selected strategies, methods and results.
4. interpret a realistic situation and design a mathematical model, as well as use and assess a model's properties and limitations.
5. follow, apply and assess mathematical reasoning.
6. communicate mathematical thinking orally, in writing, and in action.
7. relate mathematics to its importance and use in other subjects, in a professional, social and historical context.

Courses in the subject
- Mathematics 1a, 1c

The course is included in all vocational programmes.
- Mathematics 1b, 100 credits,
- Mathematics 1c, 100 credits,
- Mathematics 2a, b, c, 100 credits,
- Mathematics 3b,c, 100 credits
- Mathematic 4, 100 credits
- Mathematics 5, 100 credits
- Mathematic specialisation, 100 credits

Main learning objectives and requirements for each of the three years.

Core content. Teaching in the course should cover the following core content: understanding of numbers, arithmetic and algebra; methods of calculating using real numbers in different forms in daily life and in subjects typical of a programme, including rough approximation, mental arithmetic and estimation, as well as strategies for using digital tools; strategies for using tools from subjects typical of a programme, such as forms, templates, rules of thumb, regulations, manuals and handbooks; handling algebraic expressions and formulae relevant in subjects typical of a programme, as well as methods for solving linear equations; geometry Properties and representations of geometric objects, such as drawings, practical designs, and coordinate systems; geometric concepts chosen with regard to the needs of subjects typical of a programme, such as scale, vectors, uniformity, congruence, sine, cosine, tangent and symmetries; methods of measuring and calculating quantities that are crucial in subjects typical of programmes; units, unit conversions and processing of numerical values which are crucial in subjects typical of programmes, and rounding off methods relevant to subjects typical of programmes; relationships and change; advanced percentage concepts: per mille, ppm and percentage points; the concepts of rate of change and index, as well as methods for calculating interest and amortisation for different types of loan, the concepts of ratio and proportionality in reasoning, calculations, measurements and designs; differences between

linear and exponential processes; probability and statistics; descriptive statistics using spreadsheets, and examination of how statistical methods and results are used in society and professional life; the concepts of dependent and independent events, as well as methods for calculating probabilities in multi-stage random trials, using examples from games, and risk and safety assessments; problem solving; strategies for mathematical problem solving including the use of digital media and tools; how mathematics can be used as a tool in dealing with wide-ranging problem situations in subjects typical of a programme; the opportunities and limitations of mathematics in these situations; mathematical problems relevant to personal finances, societal life and applications in other subjects; mathematical problems related to the cultural history of mathematics.

Italian National Curriculum - Scuola Italiana Madrid

Two previous year:

1. First and second degree algebra: equations, systems and inequalities.
2. Algebra of irrational equations and inequalities
3. Analytical geometry, straight lines, conics, graphic resolutions of equations, inequalities and systems, geometric places, geometric transformations
4. Exponentials and logarithms
5. Goniometry and trigonometry
6. Probability and statistical sampling

Graduation Year:

1. Mathematical Analysis. Limits, Derivatives, Function Studies
2. Optimal problems applied to geometry, physics, practical problems
3. Integral Calculus. Indefinite, definite integrals, calculation of areas, surfaces, volumes, application to physics and sciences
4. Geometry of space
5. Probability distributions
6. Differential equations

Main learning objectives and requirements for each of the three years

Graduation Year:

TRANSVERSAL OBJECTIVES

1. to enhance the decision-making capacity in the face of possible different paths in dealing with a situation through the a posteriori and a priori critical evaluation of the different solution paths of the same problem
2. to accustom the pupil to study each issue through the analytical examination of its factors, addressing complex problems that can be traced back to the solution of several subproblems
3. to enhance the ability to critically review and logically arrange what is learned by evaluating the reliability of the results obtained, their consistency and the possibility of inferring generalizations from specific results
4. to deal with complex reasoning procedures, which require the ability to process and manage intermediate results subsequently used in the general context of the activity carried out by addressing complex problems related to the solution of multiple sub-problems
5. to develop an interdisciplinary conception of learning and culture oriented towards overcoming the humanistic-scientific dualism and a specialized conception of scientific knowledge by offering food for thought on the logical foundations of mathematics, the concept of infinity, of the concept of "beauty" in mathematics; through the offer of biographical notes of the major mathematicians who will be met.

Penultimate and third last year:

TRANSVERSAL OBJECTIVES

1. to enhance logical skills through the use of specific troubleshooting procedures
2. to learn to rework known schemes from different points of view, managing to identify in this an enrichment of one's abstraction capacity through the revision of Euclidean geometry theorems and the use of algebraic calculation procedures in the context of analytical geometry
3. to enhance the ability to critically review and logically arrange what is learned by evaluating the reliability of the results obtained, their consistency and the ability to deduce generalizations from specific results
4. to enhance the decision-making capacity in the face of possible different paths in dealing with a situation through the a posteriori and a priori critical evaluation of the different solutions for the same problem
5. to knowing how to grasp the possibility of interrelationship and interdependence of the knowledge acquired in different disciplines through the application of mathematical tools that one has to solve problems of various kinds

Italian National Curriculum - Liceo Moro

THIRD CLASS
- equations and inequalities (second degree and higher)
- irrational equations and inequalities
- successions and progressions
- equations and inequalities with absolute value
- analytic geometry in the plane: the line, the parable, the circumference, the ellipse, the hyperbola
- functions and their properties
- exponential functions
- logarithm functions

FOURTH CLASS
- goniometric functions,
- goniometric equation and goniometric inequalities
- trigonometry
- geometric transformations
- combinatorics and probability
- euclidean geometry in space
- analytic geometry in space

Main learning objectives and requirements for each of the three years

For 3rd and 4th grades, students are gradually trained to:
- Use techniques and procedures of algebraic calculation, representing them under graphic form.
- Identify appropriate strategies for solving problems.
- Build models of growth or decrease, exponential and logarithmic.
- Build and analyze models of periodic trends in the description of physical phenomena or events of other kind.

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

The school systems are quite different from each other and so are the curricula and it is difficult to identify common elements, especially for a long term period.

Folkungaskolan. In Sweden not all students are studying Math all the years through the gymnasium (most students only study math for 2 years and take course 1 and 2) and they get one grade for each course they take. The students usually have 3 hours of math every week. In the Swedish curricula it says that teaching in mathematics should aim at students developing their ability to work mathematically, by:
- developing an understanding of mathematical concepts and methods
- developing different strategies for solving mathematical problems
- using mathematics in social and professional situations.

Teaching should give students the opportunity to challenge, deepen and broaden their creativity and mathematical skills. In addition, it should contribute to students developing the ability to apply mathematics in different contexts, and understand its importance for the individual and society. Teaching should cover a variety of working forms and methods of working, where investigative activities form a part. Where appropriate, teaching should take place in environments that are relevant and closely related to praxis. Teaching should give students the opportunity to communicate using different forms of expression. In addition, it should provide students with challenges, as well as experience in the logic, generalisability, creative qualities and multifaceted nature of mathematics. Teaching should strengthen students' confidence in their ability to use mathematics in different contexts, and provide scope for problem solving both as a goal and an instrument. Teaching should also give students the opportunity to develop their ability to use digital technology, digital media, and other tools which can occur in subjects typical of programmes. Depending on what course (year at school) there are different core content to work with the aim of the subject.

Summary of curricular content by course/year:

First year/MA1b: First degree algebra and equations/inequalities, first degree analytic geometry, radicals, probabilities, function studies, problem solving;

Second year/MA2b: Second degree algebra, exponentials and logarithms, statistics, elements of logic, euclidean geometry, problem solving;

Third year/MA3b (not all students): Mathematical analysis (limits, derivatives), function studies, optimal problems (practical problems), integral calculus (indefinite, definite integrals, calculation of areas), problem solving.

Scuola Italiana Madrid. Students of the Liceo Italiano in Madrid study mathematics during all four years of the course (5 hours per week in the first, second and fourth year, three in the third year). Mathematics lessons are generally taught by the same teacher who holds the Physics lessons.

Summary of curricular content by year:

First year: Euclidean geometry, numerical sets, elements of logic, first degree algebra, first degree analytic geometry.

Second year: radicals, second degree algebra, probability and statistics; second degree analytical geometry.

Third year: second degree analytical geometry, trigonometry, exponentials and logarithms; probability and statistics.

Fourth year: mathematical analysis; integrals, differential equations, solid Geometry.

Liceo Moro. In our Liceo we have two different programs: Liceo linguistico that is more focused on learning foreign languages (they only study math 3 our per week the first two year and 2 hour per week the third, fourth and fifth year) ad the Liceo Scientifico, more focused on science in general (they study math 5 hours per week the first two years and than 4 hours per week). In the two programs the contents that are taught are more or less the same, but with a different approach: in the Liceo Scientifico every content is studied in depth. A big difference between the Italian school and the other schools in Europe, is that we have five years of high school: students finish their course at the age of 19 and then go to university a year later than the other students in Europe. That is the reason why an exchange could be more difficult the last year of school.

Summary of curricular content by year:

First year: Euclidean geometry, numerical sets, elements of logic, first degree algebra, first degree analytic geometry (Cartesian plane and straight line).

Second year: radicals, second degree algebra; probability and statistics; Euclidean geometry with demonstration.

Third year: second degree analytical geometry, exponentials and logarithms.

Fourth year: goniometric functions, trigonometry,combinatorics and probability, transformations in the plan, complex numbers, solid Geometry.

Fifth year: Analysis, function study; limits, derivatives and integrals, probability distribution, differential equations

For a long term period we could involve the first and second classes of Liceo scientifico in Italy and Madrid (14 and 15 years old) and maybe the first class at Folkungaskolan in Sweden (16-17 years old) . The common topics could be: elements of algebra; elements of geometry ; probability and statistics.

We find more common elements for the older students (16 -18) between: Liceo Scientifico in Italy and Liceo of Madrid (for example different types of inequalities, analytic geometry, elements of analysis) and Liceo linguistico in Italy and Folkungaskolan in Sweden (for example algebra, equations and inequalities, exponentials and logarithms, analytic geometry)

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF COMMON ELEMENTS.

Mathematical concepts and procedures

Folkungaskolan. Goal: To use and describe meaning of concepts and to manage procedures and solve tasks of a standard nature with and without tools.

Scuola Italiana Madrid. Goal: first year – getting used to using new languages both through the acquisition of formalism and through the use of IT supports; first and second year – consolidate the ability to calculate and use the tools of algebra; First second and third year – Knowing how to use the tools of analytical geometry: in particular, knowing how to deal with first and second degree geometric places, acquiring the ability to relate the algebraic properties of the equations of place with the geometric properties of the places studied

Liceo Moro. Goal: to understand the concept deeply and be able to apply the mathematical instruments learned to solve different kinds of problems. Learn to use specific language, understanding the power of mathematical language.

Problem solving and modeling

Folkungaskolan. Goal: To formulate, analyse and solve mathematical problems, and assess selected strategies, methods and results. To interpret a realistic situation and design a mathematical model, as well as use and assess a model's properties and limitations.

Scuola Italiana Madrid. Goal: First year – knowing how to identify the possible of interrelation and interdependence of the knowledge acquired in different disciplines through the application of the mathematical tools you have to solve problems of various kinds. Second year – knowing how to develop the ability to analyze problems with a mathematical content through the search for an effective solution strategy. Third and fourth years – enhance the ability to critically review and logically arrange what is learned by evaluating the reliability of the results obtained, their consistency and the possibility of deducing generalizations from specific results.

Liceo Moro. Goal: the students should develop strategy to analyze data, and find a way to solve a problem, in different field, using the mathematical instrument learned during the high school.

PROPOSED TOPICS/CONTENTS.

Ten modules to be implemented have been identified.

MODULE 1: FIRST DEGREE ALGEBRA, EQUATIONS, AND INEQUALITIES

Year 1 Sweden, Year 1 After Function Module Italy and Spain. Teaching hours: 10-15

Description

- first degree algebra and the basic laws of algebra (the commutative law for addition, commutative law for multiplication, associative for addition, associative for multiplication, distributive law and zero laws);
- concept of first degree equation (linear equation) and different solving techniques;
- concept of linear inequalities and different solving techniques.

Learning Objectives

- handling of formulas and algebraic expressions, including factorizing and multiplying;
- expression;
- algebraic and graphical methods for solving linear equations and inequalities;
- understand the concepts of interval and linear inequalities;
- methods for solving linear inequalities;
- problem solving and modeling with for example linear equations/inequalities.

Materials

- Relevant textbook in Mathematics or other material;
- Graphing calculator or digital tool (geogebra) for graphical methods;
- Problem solving tasks.

MODULE 2: FUNCTION STUDIES (FOCUS ON LINEAR FUNCTIONS)

Year 1 Sweden; Year 1 Italy and Spain Before Algebraic Module). Teaching hours: 10-15

Description

- concept of mathematical functions;
- different ways of representing a function;
- linear functions (and constant functions);
- power functions;
- exponential functions.

Learning Objectives

- understand the concepts of function, set of definitions and set of values;
- know the difference between function and relation;
- be able to represent functions in the form of words, function expressions, tables and graphs;
- methods for determining function values;
- digital methods of creating function graphs;
- the concept and properties of linear function;
- the straight line equation;
- the concept and properties of power functions ($f(x) = y = x^n$);
- the concept and properties of exponential function ($f(x) = y = a^n$);
- problem solving and modeling with for example linear models;

Materials

- Relevant textbook in Mathematics or other material;
- Graphing calculator or digital tool (desmos, geogebra) for graphical methods;
- Problem solving tasks.

MODULE 3: ANALYTICAL GEOMETRY

Year 2/3 Sweden, Year 2 Spain, Year 3 Italy

Teaching hours: 25

Description

- review of the Cartesian plane and of the straight line in the plane
- figure geometriche nel piano cartesiano: solve problems
- parabola with vertical and horizontal axis of symmetry
- parabolic sector
- ellipse with center in the origin of the Cartesian axes
- hyperbola with foci on the x or y axis
- iperbole equilatera
- homographic function
- tangents to conics

Learning Objectives
- Understand the concept of Geometric Place;
- be able to find Implicit and explicit equations of geometric places;
- be able to use the formulas to solve problems in the cartesian place;
- Representing conics on the Cartesian Plane. Interception between straight line and conics;
- solve different kind of problems in the Cartesian place;
- Conics in the real world. (Nature, architecture, shadows; photographic work)

Materials
- Relevant textbook in Mathematics or other material;
- Graphing calculator or digital tool (geogebra) for graphical methods;
- Problem solving tasks.

MODULE 4: SECOND DEGREE ALGEBRA: EQUATIONS, SYSTEMS

Year 2 Sweden, Year 2 Italy and Spain. Teaching hours: 15

Description
- Classification of second degree equations: pure, spurious, complete;
- Methods for solving second degree equations;
- Relationship between the solutions and the coefficients of the second degree equations;
- Decomposition of second degree trinomials by searching for the solutions of the associated equation;
- Equations with parameters. Application to physics (MUA, falling bodies);
- Second degree systems. Intersection between parabola and straight line;
- Second degree inequalities. Resolution with the graphic method.

Learning Objectives
- Handling algebra-rules for squaring and factorising when solving equations;
- Compare algebric methods and graphs for solving equations and inequalities;
- Approach to analytical geometry;
- Acquisition of the concept of duplicity of a solution;
- To deepen the concept of the resolving interval of an inequality, of the intersection of interval;
- Get used to developing the geometric aspect together with the algebraic aspect of equations, inequalities and systems.

Materials
- Relevant textbook in Mathematics or other material;
- Graphing calculator or digital tool (desmos, geogebra) for graphical methods;
- Problem solving tasks.

MODULE 5: PROBABILITY AND STATISTICAL STATISTICS

Year 1/2 Sweden; Year 1/2 Italy and Spain. Teaching hours: 15

Description
- The statistical investigation aimed at obtaining information on complex systems such as populations, rather than the analysis of the reliability of the results of a scientific experiment, are very powerful mathematical tools and are now in daily use. The mathematical tools that are used to deal with data sets are different from the methods characteristic of algebra and analytic geometry.
- This module aims to introduce students to the non-deterministic world and its main mathematical tools.
- What is a statistical survey. Sample, statistical variables, representation of statistical data. Methods for calculating different measures of central tendency and measures of dispersion including standard deviation.
- Normal distribution.
- Indicators of effectiveness, efficiency and quality.
- Definitions of probability, event and sample space.
- Calculation of probabilities, independent and dependent events.
- Handling algebra-rules for squaring and factorising when solving equations.
- Compare algebric methods and graphs for solving equations and inequalities.
- Approach to analytical geometry.
- Conditional probability.
- Realization of a real statistical survey with the choice of the population, the sample, the variables and the methods of detection and analysis of the collected data. (e.g. survey on the school population, or on historical data series, or on a random sample through street interviews, or on data collected in the physics / science laboratory).

Learning objectives

- Examination of how statistical methods and results are used in society and in science.
- Design, organize, implement and discuss the results of a statistical survey.
- Visually and mathematically represent the results of a statistical survey
- Familiarize himself with the concept of probability of an event and how it can be calculated
- Accept that the solution of a problem can be known only in terms of probability that it will happen, or accept the indeterminacy of natural phenomena

Materials

- Relevant textbook in Mathematics or other material.
- Spreadsheet such as excel or similar computer databases such as access or similar.
- Software for on line survey.

MODULE 6: EXPONENTIALS AND LOGARITHMS

Year 2 Sweden, Year 2/3 Italy and Spain. Teaching hours: 20

Description

- review of properties of powers
- powers with real exponent and conditions of existence
- graphic construction of the exponential and study of its properties, making connection with functions in general
- exponential equations and different solving techniques
- exponential inequalities and different solving techniques
- logarithm function as an inverse function of the exponential
- properties of logarithms
- logarithmic equations and different solution techniques.
- logarithmic inequalities and different solution techniques.
- growth and decay models
- problems to be solved with exponential and logarithmic inequalities / equations

Learning objectives

- know how to solve exponential and logarithmic equations and inequalities
- deepen and better understand the concept of function
- deepen and understand the techniques of graphic resolution of inequalities
- approach the concept of limit and asymptote
- acquire tools for the study of mathematical analysis

Materials

- Relevant textbook in Mathematics or other material.
- Graphing calculator or digital tool (desmos, geogebra) for graphical methods.
- Problem solving tasks.

4. 2 SCIENCE
NATIONAL CURRICULA
Swedish National Curriculum - Folkungaskolan

The subject of science studies is by its nature interdisciplinary with a foundation in biology, physics, earth sciences and chemistry. The subject covers health, energy and sustainable development, knowledge areas that have emerged in the intersection between science and social science.

Aim of the subject. Teaching of science studies should aim at helping students develop their knowledge of science, and the ability to critically assess and develop their views on issues with a scientific content. It should lead to students developing an understanding of how scientific knowledge can be used in both professional life and everyday situations, and enabling students to make personal choices and form their views.

On the basis of current issues and events, teaching should give students the opportunity to use the knowledge and working methods of science. This means that while teaching should cover a variety of content, such as environmental and climate issues, the Earth's distribution of resources, recycling, health or genetic modification, it should also demonstrate how these issues can be managed using a scientific approach. By discussing and exploring issues with a social dimension, students should be given the opportunity to consolidate, deepen and develop their scientific knowledge to be able to meet, understand and influence their own contemporary conditions. Teaching should give students the opportunity to use digital technology and other tools to search for and acquire knowledge about science.

Teaching in the subject of science studies should give students the opportunities to develop the following:

1. The ability to use knowledge of science to discuss, form views and formulate different courses of action.
2. Knowledge of the role of science in current social issues and in relation to sustainable development.
3. Knowledge of the consequences of different lifestyles for both personal health, public health and the environment.
4. Knowledge of the structure and function of the human body, and its interaction with its surroundings.
5. Knowledge of how science is organised and how it can be critically examined and used for critical examination.
6. Knowledge of the significance of scientific theory for the development of societies and people's world view.

Courses in the subject

- Science studies 1a1, 50 credits, which builds on knowledge from the compulsory school or equivalent. Grades in the course cannot be included in the student's diploma together with the grade in the course science studies 1b.
- Science studies 1a2, 50 credits, which builds on science studies 1a1. Grades in the course cannot be included in the student's diploma together with the grade in the course science studies 1b.
- Science studies 1b, 100 credits, which builds on knowledge from the compulsory school or equivalent. Grades in the course cannot be included in the student's diploma together with grades in the courses science studies 1a1 or science studies 1a2.
- Science studies 2, 100 credits, which builds on the course science studies 1a2 or science studies 1b.

Main learning objectives and requirements for each of the three years

Core content

Teaching in the course should cover the following core content:

- Issues concerning sustainable development: energy, climate and impact on the ecosystem. Ecosystem services, utilisation of resources and the viability of ecosystems.
- Different aspects of sustainable development such as consumption, allocation of resources, human rights and gender equality.
- Scientific aspects, reflection on and discussion of norms concerning human sexuality, sexual desire, relationships and sexual health.
- Working methods of science, such as observation, classification, measurement and experimentation, and ethical perspectives related to scientific exploration.
- The scientific approach, how to put questions that can be investigated scientifically, and how to go about examining phenomena in the surrounding world.
- How science can be critically examined, and how a scientific approach can be used to critically examine statements lacking a scientific basis.

DEEDS PROJECT

ITALIAN NATIONAL CURRICULUM - SCUOLA ITALIANA MADRID

In our school, the normal Italian Curriculum for a scientific high school (lasting 5 years) is concentrated in 4 years, in order to make our students enter the university in the same age as students of a regular Spanish school. Therefore, our 2nd, 3rd and 4th years correspond to 3rd, 4th ad 5th in the Italian school, while the first year concentrate two years. Furthermore, our school has a mixed technical-humanistic approach, therefore with a different scenario and content for each discipline compared to a normal scientific Spanish school. While in the first year more emphasis is concentrated in developing student's skill in observation and description (using a correct scientific procedure and language), in the last 3 years of school the focus is on problems analysis and conceptualization, application of models to real phenomena, formalization of scientific knowledge.

2nd year (two years before the last):

BIOLOGY : introduction to life science. Biology: main characteristics of biomolecules (cabohydrates, lipids, proteins and nucleic acid). Mendel and introduction to genetics.. The cell: structure and main function

CHEMISTS: structure of the matter. The different models of atoms. Periodic table of elements. From atomic structure to chemical bond. Main inorganic compounds. Nomenclature and properties.

3rd year:

BIOLOGY : Evolution of life and biodiversity Structure and functions of living beings. The human body

CHEMISTS: Chemical reactions (different types, redox). Kinetics of chemical reactions. Chemical balance. Solubility. Definition and properties of base and acid. pH.

4th year (last):

EARTH SCIENCE: Plate tectonics

BIOLOGY AND BIOCHEMISTRY: Organic chemistry. Classification of compounds and nomenclature. Chemistry of metabolic processes. Application of organic chemistry in human life. Genetic manipulation

ECOLOGY AND RELATION HUMAN SOCIETY / ENVIRONMENT

ITALIAN NATIONAL CURRICULUM - LICEO MORO

3rd year

BIOLOGY: Studies on sexual chromosomes, Genetic diseases and genealogical trees, Chromosome maps, Structure and functions of DNA, Genic expression: from DNA to proteins, The regulation of genic expression, Mutations and genetic diseases, Modern techniques to study DNA, Population genetics, Genetics and evolution, Evolutionary theories, Genetics of viruses and bacteria (mention), Metabolism of bacteria and yeasts (mention), Organisation of the human body, Tissues, organs and apparatuses, Homeostasis, Skeletal and muscular system, Digestive apparatus, Cardiovascular apparatus, Pulmonary apparatus, Excretory apparatus, Lymphatic and immune systems, Endocrine system, Nervous system. Organs of sense, Reproductive apparatus.

4th year

CHEMISTRY: Concept of mole, Ponderal laws of matter, Ideal gas equation, Atomic models, Main subatomic particles, Quantum numbers and orbitals, The periodic table and its properties, Chemical bonds: intramolecular and intermolecular forces, Geometry of molecules, Hybridization of atomic orbitals, Classify and name compounds, Solutions, Chemical reactions, Stoichiometry and stoichiometric calculations, Heat transfer, Reaction rate, Chemical equilibrium, Acids, bases and pH, Hydrolysis, Acid/base neutralization Buffer solutions

Main learning objectives and requirements for each of the three years

Biology – Third year

General abilities

- Collect, organize and represent data using schemes, tables and graphs
- Interpret data on the basis of simple models
- Present the results of analysis
- Use correctly the scientific terms of biology and distinguish them from common language terms

Specific abilities

- Describe how DNA was discovered
- Describe how DNA and RNA language is used to produce polypeptides
- Explain the meaning of "genic expression"
- Understand the conquests in genetics
- Describe the alcoholic and lactic fermentation and their products
- Recognize the main steps in the origin and evolution of the human species
- Understand the evolutive importance of genic variability in a population

- Understand the influence of natural selection in the transmission of favourable characters in a population
- Describe the different levels of structural organization in the human body
- Describe structures and functions of different tissues
- Recognise the fundamental characters of a tissue through observations with a microscope
- Define homeostasis and explain it with examples
- Recognise the relations between different apparatuses and systems of the human body
- Recognise the relevant events that influence the health of the organism, recalling the principles of prevention
- For applied science only: execute simple laboratory techniques and write lab report

Chemistry - Fourth Year
Specific abilities
- Link mass, chemical quantity and number of atoms in a sample
- Apply the ponderal laws of matter
- Execute simple laboratory techniques about moles and laws of gases
- Write electron configuration of all elements using the specific symbols and rules
- Find the number and type of bonds that an element can form, based on its electron configuration
- Identify a polar/nonpolar molecule after determining its geometry with the VSEPR theory
- Understand the importance of the hydrogen bond in nature
- Apply IUPAC or traditional rules to name a compound
- Write the formula of simple compounds
- Apply the concept of concentration and colligative properties
- Recognize and balance chemical reactions
- Understand the importance of energy variations in a chemical transformation
- Understand when a reaction is spontaneous
- Understand the meaning of chemical equilibrium
- Determine the pH of a solution
- Determine the strength of an acid or base
- For applied science only: execute simple laboratory techniques and write lab reports

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

Liceo Moro and the Italian School of Madrid are both high schools with a stress on scientific subjects like mathematics, physics and natural science. The curricula of Natural Science are the same: they include biology, chemistry and geosciences.

In Liceo Moro they are spread over a five-year period, while in the Italian School of Madrid in four years.

Students at the Italian School of Madrid have 3 hours/week of Natural Sciences for four years, while Italian students at the standard and bilingual course have 2 hours/week for the first two years and three hours/week for the following three years. The applied science course offers instead 3 hours/week in the first year, 4 hours/week in the second year and 5 hours/week in the following three years. That means that students at the applied science course have the double number of hours compared to the other courses.

The number of hours is almost the same if we consider the whole course of studies and don't take into account the Applied Science course, but the contents are organized in different way.

In the Italian School of Madrid the contents of chemistry and geosciences are anticipated as compared to Liceo Moro, while the contents of biology have the same distribution along the years. The wider difference can be seen in the last two school years, as shown below:

Year	CONTENTS OF NATURAL SCIENCE CURRICULA		
	LICEO MORO (STANDARD AND BILINGUAL COURSE)	LICEO MORO (APPLIED SCIENCE COURSE)	ITALIAN SCHOOL OF MADRID
1	Geoscience (astronomy, atmosphere, geomorphology) + Chemistry (introduction)	Geoscience (astronomy, atmosphere, geomorphology) + Chemistry (introduction) + laboratory	Geoscience (astronomy, atmosphere, geomorphology, petrography, stratigraphy, volcanology, seismology)
2	Biology (evolution, biochemistry, cell biology, classical genetics)	Biology (evolution, biochemistry, cell biology, classical genetics) + laboratory	Biology (biochemistry, cell biology, classical genetics) + Chemistry (general)
3	Biology (genetics, human body physiology and anatomy)	Biology (genetics, human body physiology and anatomy) + laboratory	Biology (evolution, genetics, human body physiology and anatomy) + Chemistry (inorganic and organic)
4	Chemistry (general, inorganic)	Chemistry (general, inorganic) + laboratory	Biology (biochemistry, genetics, biotechnologies) + Geoscience (plate tectonics)
5	Chemistry (organic) + Biology (biochemistry, genetics, biotechnologies) + Geoscience (petrography, stratigraphy, volcanology, seismology, plate tectonics)	Chemistry (organic) + Biology (biochemistry, genetics, biotechnologies) + Geoscience (petrography, stratigraphy, volcanology, seismology, plate tectonics) + laboratory	-

In the fourth-year Spanish students study the contents of the fifth year for the Italian students. For this reason, the best time for an exchange is to be found in the first three years, when the themes treated partially overlap.

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF POSSIBLE COMMON ELEMENTS.

Due to the fact that the subjects and contents are the same, also the learning objects (competences) are similar.

They consist in being able to solve problems (this requires the ability to interpret data, to find connections, to apply models), to use a correct scientific language and terms, to follow correct procedures. At Liceo Moro the stress is also put on the ability to work in groups and analyse experimental situations, but only for applied science students.

PROPOSED TOPICS/CONTENTS.

The Science group identified six modules to be implemented for a short-term mobility or a long-term mobility. They all belong to topics of year 3.

MODULE 1: BIOLOGY - CLASSICAL GENETICS

Year 3. Teaching hours: 8

Description

- The experiments of Mendel. The scientific method of Mendel.
- The first law of Mendel. The second law of Mendel. Heterozygotes and homozygotes. Genotypes and phenotypes. Punnett's squares. The cross test. The third law of Mendel.
- Exercises and problems.
- Mutations. Examples of mutations. Incomplete dominance and codominance. Multiple alleles. Epistasis and polygenic inheritance. Pleiotropy.

Learning Objectives

- Interpret and organize information. Find relations and logical connections. Apply knowledge to real situations. Use a scientific language. Analyse problems. Apply models to real phenomena. Formalize the scientific knowledge.

Materials

- Textbook, slides, videos, exercises and problems.

MODULE 2: BIOLOGY – HUMAN BODY TISSUES

Year 3. Teaching hours: 4

Description

- Hierarchy of the human body: cells, tissues, organs, systems, body. Difference between systems and apparats.
- Staminal cells. Different types of staminal cells. Epithelial tissue. Connective tissue. Different types of connective tissues. Muscle tissue. Nervous tissue.
- Observation of tissues with a microscope.

Learning Objectives

- Interpret and organize information. Find relations and logical connections. Apply knowledge to real situations. Use a scientific language. Analyse problems. Apply models to real phenomena. Formalize the scientific knowledge.

Materials

- Textbook, slides, videos, exercises.

MODULE 3: BIOLOGY – MUSCOLESKELETAN SYSTEM

Year 3. Teaching hours: 6

Description

- Structure of the human skeleton: main bones (names and position). Observation of a real size skeleton. Different shapes of bones. Compact and spongy bone tissue. Creation and destruction of bones. Main parts of long bones. Differences between the spongy and the compact bones. Flat bones. Joints.
- Types of muscular tissues. Antagonist or agonist muscles. Muscular fibres. Contraction. Characteristics of the cardiac muscle. Characteristics of the smooth muscle.

Learning Objectives

- Interpret and organize information. Find relations and logical connections. Apply knowledge to real situations. Use a scientific language. Analyse problems. Apply models to real phenomena. Formalize the scientific knowledge.

Materials

- Textbook, slides, videos, exercises.

MODULE 4: BIOLOGY – DIGESTIVE SYSTEM

Year 3. Teaching hours: 8

Description

- The three steps of digestion. Enzymes needed for digestion. Gastrointestinal tract and its layers. Peristalsis. The mouth.
- Functions of stomach. Illnesses of the stomach.
- Intestine, pancreas and liver. The control of digestion by the nervous system.
- Diets. The pyramid of food. Food intolerances. Food disorders.
- Laboratory: observation of the activity of enzymes.

Learning Objectives

- Interpret and organize information. Find relations and logical connections. Apply knowledge to real situations. Use a scientific language. Analyse problems. Apply models to real phenomena. Formalize the scientific knowledge.

Materials

- Textbook, slides, videos, exercises.

MODULE 5: BIOLOGY – NERVOUS SYSTEM

Year 3 . Teaching hours: 10

Description

- Central and peripheral nervous systems. Structure of neurons. Glial and Schwann cells. Transmission of signals along neurons.
- Synapses. Types of neurotransmitters.
- Anatomy of the peripheral nervous system. Cranial and spinal nerves. Somatic and autonomic nervous systems. The sympathetic nervous system, the parasympathetic nervous system.
- Anatomy of the central nervous system. White and gray matter. The spinal cord. Structure of the brain.
- How information is processed by the brain. The limbic system. Short- and long-term memory. Mirror neurons.
- Touch perception. Pain perception. Visual perception. The eye. Auditory perception. Body position perception. Gustatory perception.
- Drugs. Nervous diseases.
- Laboratory experiences on vision.

Learning Objectives

- Interpret and organize information. Find relations and logical connections. Apply knowledge to real situations. Use a scientific language. Analyse problems. Apply models to real phenomena. Formalize the scientific knowledge.

Materials

- Textbook, slides, videos, exercises.

MODULE 6: BIOLOGY – CIRCULATORY SYSTEM

Year 3 . Teaching hours: 8

Description

- General characteristics of the circulatory system in humans.
- Anatomy of hearth. Cardiac contraction. Electrocardiograms. Hearth diseases.
- Blood vessels: types, layers. Blood pressure. Activity on blood pressure. Diseases of blood vessels.
- Composition of blood. Plasma. Red blood cells. White blood cells. Platelets. Blood analysis. Blood types. The Rh factor.
- Activity: interpret a blood analysis data.

Learning Objectives

- Interpret and organize information. Find relations and logical connections. Apply knowledge to real situations. Use a scientific language. Analyse problems. Apply models to real phenomena. Formalize the scientific knowledge.

Materials

- Textbook, slides, videos, exercises.

4. 3 HISTORY

NATIONAL CURRICULA

Swedish National Curriculum - Folkungaskolan

History is both a humanistic and social science subject that deals with the individual's conditions and changes in society over time. People's opportunities and choices in the future are dependent not only on actions and events in the past, but also on making contemporary interpretations of these.

Aim of the subject. Teaching in the subject of history should aim at helping students broaden, deepen and develop their historical consciousness through knowledge of the past, the ability to use historical methods and an understanding of how history is used. Students should thus be given the opportunity to develop their understanding of how different interpretations and perspectives on the past influence our views of the present and perceptions of the future.

Through teaching students should be given the opportunity to develop their historical knowledge and the ability to use history as a frame of reference to understand issues of importance in the present and the future, and to analyse historical processes of change from different perspectives. Students should also be given the opportunity to develop an understanding of living conditions of different ages and explain the role played by people in social change. Teaching should contribute to the realisation that people in every age should be understood in relation to the conditions and values of their time. Students should also develop an understanding of the present and the ability to orient themselves to the future. History is used to both influence social change and to create different identities. Teaching should thus give students the opportunity to develop an understanding of and tools to assess how different people and groups in space and time have used history, as well as the opportunity to reflect on the importance of cultural heritage in understanding identity and reality. Teaching should provide students with the opportunity to work with historical concepts, questions, explanations and different relationships in time and space to develop an understanding of historical processes of change in society. Use of historical methods should be a part of teaching. This means that students should be given the opportunity to search for, examine, interpret and assess different types of sources, and use different theories, perspectives and tools to explain and illustrate processes of historical change. Through teaching students should be given the opportunity to present the results of their work using various forms of expression, both orally and in writing, and by using modern information technology.

Teaching in the subject of history should give students opportunities to develop the following:

1. Knowledge of time periods, processes of change, events and persons on the basis of different interpretations and perspectives.
2. The ability to use a historical frame of reference to understand the present and to provide perspective on the future.
3. The ability to use different historical theories and concepts to formulate, investigate, explain and draw conclusions about historical issues from different perspectives.
4. The ability to search for, examine, interpret and assess sources using source-critical methods, and to present the results using various forms of expression.
5. The ability to investigate, explain and assess the use of history in different contexts and during different time periods.

Courses in the subject

- History 1a1,
- History 1a2,
- History 1b, 100 credit
- History 2a 100 credit
- History 2b 100 credit
- History 3 100 credit

Main learning objectives and requirements for each of the three years

Core content. Teaching in the course should cover the following core content:

The European classification of time periods from a chronological perspective. Prehistory, Ancient history, Antiquity, the Middle Ages, the Renaissance, and the Enlightenment with some selected processes of change and areas of specialization. Problematisation of the dependency of historical classification of periods on cultural and political conditions based on specific areas, such as why the term, the Viking Age, was introduced in Sweden in the late 19th century, or comparisons with classifications in some non-European cultural spheres such as China or India. Industrialisation and democratisation during the 19th and 20th centuries, as well as key global processes of change and events, such as migration, peace-making, resource distribution and increased prosperity, international cooperation, human rights, gender equality, colonialism, dictatorships, genocide and conflicts. Historical source material that reflects people's roles in political conflict, cultural change, and the attempts of men and women to change both their own situations and those of others. Different perspectives based on social background, ethnicity, generation, gender and sexuality. Interpretation and use of different kinds of source materials. How individuals and groups have used history in connection with current conflicts and attempts to cooperate.

DEEDS PROJECT

Italian National Curriculum - Scuola Italiana Madrid

In the Italian school in Madrid the national curriculum is integrated with the Spanish one. Students also study local history in Spanish language, with a mother-tongue teacher. In the last three years of the curriculum they study Spanish history in the Middle Ages and Modern Age, Spanish history in 18th and 19th century and Spanish history in 20th century. Like in the Italian curriculum they also study the process and the general principles of the national Constitution. In the last three years of the curriculum students study European History, focused especially on the Italian one:

- from the 11th century to the middle of the 17th century
- from the middle of the 17th century to the end of 19th century
- 20th century

Main learning objectives and requirements for each of the three years

It is required the knowledge of the Ancient History and of the history of Early Middle Ages. The objective is increasing knowledge about European and Italian history and developing a critical thinking in order to take part to the multicultural and democratic society.

Italian National Curriculum - Liceo Moro

3rd year: the formation of the modern State. Italian and European history between 1000 and 1700; in particular: the Church and its relationships with the political power (e.g. the Holy Empire); the impact of the Reformation and the counter-Reformation; the English revolutions; the French Absolutism

4th Year: Europe dominating the world. Italian and European history in a global frame from 1700 to 1900. The American and French revolutions; the Napoleonic period. Nations and countries (in particular, the unification of Italy). The Industrial revolution, the social question, the birth of the proletariat. The age of colonialism and imperialism. Italy and Europe in the second half of the 19th century.

5th year (graduation year): the 20th century: towards a globalized world. The two world wars and the genocides; the Russian revolution: the 1929 crisis. The European totalitarian regimes. Italy in the second half of the 20th century from the economic "boom" to "Tangentopoli" (i.e. the end of the traditional political system, 1992). The de-colonization. The Cold War. The end of the USSR. Open questions (e.g. the Palestinian question).

All the following learning objectives are meant to be achieved gradually, starting from the third year to the fifth. At the end of the three years the students will be able to:

- Place the historical events in time and space
- Understand the elements of continuity and discontinuity between different periods and civilizations
- Understand the causes and the consequences of the historical events
- Understand the different features of the different political/institutional systems
- Develop personal reflexions and critical thought
- Use the specific vocabulary of the discipline
- Analyze an historical source, understanding its main topics and its context

Moreover, the students will get to learn and understand the fundamentals principles of the Italian Constitution, as well as the UN and the EU institutions.

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

Note: our Suede colleague added several points taken from the 2b Swedish curriculum. They are listed in green at the end of this section. Some of them correspond to the ones provided by the DEEDS organization, some others don't. In black there are the Swedish core contents; in blue the possible themes/events of the Italian/Spanish curriculum that would fit in it.

1. The European classification of time periods from a chronological perspective. Prehistory, Ancient history, Antiquity, the Middle Ages, the Renaissance, and the Enlightenment with some selected processes of change and areas of specialization. Problematisation of the dependency of historical classification of periods on cultural and political conditions based on specific areas, such as why the term, the Viking Age, was introduced in Sweden in the late 19th century, or comparisons with classifications in some non-European cultural spheres such as China or India.

Possible processes of change:

3rd year: the formation of the European modern state (from feudalism to modern countries, e.g. France, Spain... with the exception of Italy and the German Empire); the impact of the Protestant reformation; the discovery of the New World.

4th year: the American and French Revolution ; the unification of Germany, the unification of Italy; the Industrial Revolution.

5th year: the two World Wars; the 1929 crisis and depression; the Russian revolution.

2. Industrialisation and democratisation during the 19th and 20th centuries, as well as key global processes of change and events, such as migration, peace-making, resource distribution and increased prosperity, international cooperation, human rights, gender equality, colonialism, dictatorships, genocide and conflicts.

Possible themes (to be dealt with during the 5th year): The European totalitarianisms; Colonialism and de-colonialism; The International organizations like the United Nations Organization and the European Union.

3. Historical source material that reflects people's roles in political conflict, cultural change, and the attempts of men and women to change both their own situations and those of others. Different perspectives based on social background, ethnicity, generation, gender and sexuality.

Possible sources:

4th year: the Declarations of the rights of man and citizen (1789, 1793); The Declaration of independence (1776)

5th year: folk and rock songs of the '60s , songs by Woody Guthrie, Billie Holiday, Artists Against Apartheid....

5th year: private correspondence between family members and combatants of the two world wars; the private correspondence of partisans, political prisoners and deportees during the Nazi occupation

3. Interpretation and use of different kinds of source materials.

4. How individuals and groups have used history in connection with current conflicts and attempts to cooperate.

2b Swedish curriculum

1. Thematic specialisation concerning historical questions of importance from a cultural perspective, such as leading ideas, mentalities and world views, the development of the arts, and also changes in cultural forms of communication over different periods.

2. Different concepts of art and culture from a historical perspective. The encounter between established culture and different forms of new cultural movements, including popular cultural movements of the 20th century.

3. Historical concepts and explanatory models, and their application to different historical questions.

4. Examination and interpretation of historical source material, such as archives, press material and databases, as a starting point for investigating historical questions.

5. How history is used in different cultural forms. The importance of different historical themes in different genres, such as film, literature and music, and also in different forms of youth culture.

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF POSSIBLE COMMON ELEMENTS.

Note: the objectives enlisted with a number are the Swedish ones; the objectives enlisted with a point are the Italian/Spanish ones; we tried to put them together according to the school year of attendance. The first year is intended for Sweden and Spain; the second is the Italian equivalent.

2nd/3rd year
1. Knowledge of time periods, processes of change, events and persons on the basis of different interpretations and perspectives.
- Place the historical events in time and space
- Understand the elements of continuity and discontinuity between different periods and civilizations
- Understand the causes and the consequences of the historical events

3rd/4th year
3) The ability to use different historical theories and concepts to formulate, investigate, explain and draw conclusions about historical issues from different perspectives.
4) The ability to search for, examine, interpret and assess sources using source-critical methods, and to present the results using various forms of expression.
- Understand the different features of the different political/institutional systems
- Develop personal reflexions and critical thought
- Analyse an historical source, understanding its main topics and its context

PROPOSED TOPICS/CONTENTS.

MODULE 1: THE CLASH/MERGING OF IDEAS, MENTALITIES AND WORLD VIEWS
Year 2/3. Teaching hours: 12-14
Description
- The Crusades (as seen from both the Muslim and Christian points of view)
- The birth of the printing press
- Humanism and Renaissance
- From absolutism to people's sovereignty

Learning objectives
To understand historical questions of importance from a cultural perspective, such as leading ideas, mentalities and world views, the development of the arts, and also changes in cultural forms of communication over different periods.
Materials
Selected texts of contemporary authors (Erasmus, Machiavelli, Pico della Mirandola, Montaigne...), tables, images (maps, engravings, paintings, portraits...) about the subjects.

MODULE 2: THE PROTESTANT REFORMATION AND THE RUPTURE OF THE UNITY OF CHRISTIANITY
Year 2/3. Teaching hours: 12-14
Description
- doctrinal aspects of Luther's reform in the context of the selling of indulgences
- political consequences and wars of religion such as:
- the Anglican schism
- the wars of religion in France
- the failure of Charles V's dream of an universal monarchy in Europe
- the 30 years war
- the Counter-Reformation of the Catholic Church: inquisition, forbidden books

Learning objectives
To understand key global processes of change and events. To understand the Lutheran and Catholic point of view about the doctrinal aspects and to be able to take different perspectives.
Materials
Selected texts of contemporary authors (Martin Luther, Charles V, The Trento Council...), tables, images (maps, engravings, paintings, portraits...) about the subjects; films such as : "Luther" by Eric Till, 2003.

MODULE 3: THE DISCOVERY OF THE NEW WORLD
Year 2/3. Teaching hours: 16-18
Description
- the Viking pioneers
- the exploration travels (main characters, technological innovation)
- The discovery of the New World
- the beginning of colonization (differences between Spanish and Portuguese colonization)
- the collapse of Amerindian population
- the triangular commerce and slavery
- the consequences of slavery today (e.g. racism in the US)

Learning objectives
To understand key global processes of change and events.
Materials
Selected texts (Las Casas, Todorov), tables, images (maps, engravings, paintings, portraits...) about the subjects.
As regards today's consequences: songs by black people, newspaper articles (e.g. mr. Floyd's death and the policeman Chauvin trial...) films such as: Driving miss Daisy, by Bruce Beresford, 1989; The great debaters, by Denzel Washington, 2007 or Hidden figures, by Theodore Melfi, 2016, Mission by Roland Joffé, 1986.

MODULE 4: THE BIRTH OF MODERN STATE
Year 2/3. Teaching hours: 18-20
Description
- the Italian "Comuni"
- the Italian "Signorie"
- Dynastical wars in Europe
- the French absolutism

Learning objectives

- To understand key global processes of change and events.
- To understand the sources and visions of political power.

Materials

- Selected texts of contemporary authors, tables, images (maps, engravings, paintings, portraits...) about the subjects.
- Sources/visit: Renaissance ideal cities, such as Palmanova, Pienza, Terra del Sole, Sabbioneta (the last one listed by UNESCO)
- https://www.turismosabbioneta.org/it/da-vedere/la-citta
- Sources/visit: An example of Renaissance modern state capital city, (with its new civil and military buildings and services) such as Mantova (Mantua) or Ferrara (the last one listed by UNESCO)
- https://journalistontherun.com/2019/07/02/mantova-italy-lombardia/
- https://whc.unesco.org/en/list/733/
- Sources/visit: Palazzo Strozzi's archive is a very special place in Florence where it is possible to see the original works of Niccolò Machiavelli who composed The Prince and others contributions to modern political thought.
- https://www.reneu.eu/eren.php?c[ ]=63081

MODULE 5: THE AGE OF ENLIGHTENMENT

Year 3/4. Teaching hours: 16-18

Description

- The Encyclopédie
- Arts and Sciences
- New political views

Learning objectives

To understand people's roles in political conflict, cultural change, and the attempts of men and women to change both their own situations and those of others. To be able to take different perspectives.

Materials

Selected texts of contemporary authors (Diderot, D'Alembert, Montesquieu, Rousseau...), tables, images (maps, engravings, paintings, portraits...) about the subjects.

Sources/visit: Musei Universitari of Bologna, Museum of Palazzo Poggi (art and science during the Enlightenment)

https://sma.unibo.it/en/the-university-museum-network/museum-of-palazzo-poggi/museum-of-palazzo-poggi

Sources/visit: MEB, Jewish Museum of Bologna and the ghetto (about the Jewish community in Bologna from the middle ages to the contemporary age.

https://www.museoebraicobo.it/en/jewish-museum-of-bologna

Sources/visit: Civici Musei of Reggio Emilia, Lazzaro Spallanzani's collection: a collection of natural history samples collected by the greatest biologist of the XVIII century

https://www.musei.re.it/en/collections/palazzo-dei-musei-museums-palace/18371-2/

MODULE 6: THE AMERICAN AND FRENCH REVOLUTION

(year 3/4. Teaching hours: 14-16

Description

- The 13 colonies and their relationship with great Britain
- The war of independence
- The Absolutist France in the XVIII century
- The constitutional revolution
- The Jacobin revolution
- The Directory revolution

Learning objectives

To understand people's roles in political conflict, cultural change, and the attempts of men and women to change both their own situations and those of others. Different perspectives.

Materials

- Selected texts of contemporary authors, tables, images (maps, engravings, paintings, portraits...) about the subjects.
- The Declarations of the rights of man and citizen (1789, 1793); The Declaration of independence (1776); iconography and symbols of the revolutions (e.g. Betsy Ross sewing the US flag; the Phrygian cap in France...); Olympe de Gouges' Declaration, etc.

MODULE 7: THE AGE OF NAPOLEON

(year 3/4. Teaching hours: 12-14

Description

- military conquests and ways to rule the conquered countries
- the reception of the Civil Code in Europe
- Napoleon heritage
- the iconography of Napoleonic regime
- the British celebration of Napoleon defeat

Learning objectives

To understand people's roles in political conflict, cultural change, and the attempts of men and women to change both their own situations and those of others. Different perspectives.

Materials

- Selected texts of contemporary authors, tables, images (maps, engravings, paintings, portraits…) about the subjects. Films such as The Duellists, by Ridley Scott, 1977.

MODULE 8: THE INDUSTRIAL REVOLUTION

Year 3/4t. Teaching hours: 18-20

Description

- the steam machine in the textile sector
- the steam machine and the railways
- the emergence of new ideologies (liberalism vs socialism) and of the working class
- inside Europe: the strategies for the nationalization of the masses
- outside Europe: imperialism and colonialism
- the crisis 1873-1896 and the restructuring of capitalism (monopoly, trusts, cartels, etc.

Learning objectives

To understand key global processes of change and events.

Materials

- Selected texts of contemporary authors, tables, images (maps, engravings, paintings, portraits…) about the subjects; films such as "Suffragette" by Sarah Gavron, 2015.

Sources/visit: Museum of Industrial Heritage in Bologna which houses two interesting collections/ exhibitions: "Bologna, city of water and silk", referring to the rise and developments of the silk industry XVII sec., and "The Aldini-Valeriani collection" which includes machinery and technical and scientific instruments from the city's oldest technical school, founded by Giovanni Aldini, nephew and pupil of Luigi Galvani. The collection testifies the close connection between scientific research, schooling and industrial development in the Modern Era.
http://www.museibologna.it/patrimonioindustrialeen

MODULE 9: PROCESSES OF CHANGES IN EUROPE

Year 3/4. Teaching hours: 12-14

Description

- the unification of Germany
- the unification of Italy
- The political changes in France, form the 2nd to the 3rd Republic passing through the 2nd empire

Learning objectives

To understand key global processes of change and events

Materials

Sources/visit: Palazzo Carignano, seat of the first Italian Parliament (from 1861) which now houses The National Museum of the Italian Risorgimento (=national unification process), profoundly renewed.
http://www.museorisorgimentotorino.it/nuovo_allestimento.php

Selected texts of contemporary authors, tables, images (maps, engravings, paintings, portraits…) about the subjects; films such us Viva l'Italia by Roberto Rossellini (English subtitled), 1961; The Leopard by Luchino Visconti (English subtitled), 1963;

4. 4 PHILOSOPHY
NATIONAL CURRICULA

Swedish National Curriculum - Folkungaskolan

Philosophy is a humanistic subject with ramifications in all areas of human knowledge and activity, since it covers fundamental issues concerning the nature of reality, the possibility of knowledge and the existence of values. Philosophical activity is about thinking independently, critically and analytically about these issues in the form they are expressed in private, social and cultural life and science. Formulating and clarifying philosophical issues, as well as determining viewpoints is the purpose of philosophy.

Aim of the subject. Teaching in the subject of philosophy should aim at developing students' ability to participate in a permanent ongoing dialogue about what reality is, about what can be known with certainty, and about human existence and actions. Teaching should give students the opportunity to develop their thinking by confronting philosophy from different historical periods and traditions, which can provide inspiration to view existence from a broader perspective, encourage thinking in new directions and challenge ingrained ideas. Students should also become familiar with the importance philosophy has had with regard to cultural, political and scientific development. Teaching should give students the opportunity to develop the ability to analyse and consider different perceptions of reality, and various epistemological and scientific views. It should also give students the opportunity to develop the ability to analyse and consider existential, ethical and current socio-philosophical issues and theories. Students should be given the opportunity to develop tools for analysing and assessing information and thereby develop critical and independent thinking, and the ability to adopt personal standpoints based on well thought-out arguments. Furthermore, students should be given the opportunity to develop the ability to understand nuances of language, and to reason logically. Teaching should give students the opportunity to work with philosophical issues and theories from different historical periods and traditions presented through various media. Students should be given the opportunity to think, discuss and reason analytically and creatively.

Teaching in the subject of philosophy should give students the opportunities to develop the following:

- Knowledge of the main characteristics of different views of reality and different ways of viewing knowledge.
- Knowledge of theoretical views in science and scientific methods.
- Knowledge of ethics, different ethical viewpoints, and normative ethical theories, and also their application.
- Knowledge of existential questions and social philosophy, and also current trends in modern philosophy.
- The ability to identify philosophical issues, and also to analyse, explain and determine a position on classical and contemporary philosophical questions and theories using relevant concepts.
- Knowledge of linguistic philosophy and the ability to clarify nuances of language by means of linguistic concepts, and also the ability to assess arguments and to distinguish and apply logical arguments.

Courses in the subject

- Philosophy 1, 50 credits.
- Philosophy 2, 50 credits, which builds on the course, philosophy 1.

Main learning objectives and requirements for each of the three years

Core content. Teaching in the course should cover the following core content:

- Existence and knowing, not only basic theories dealing with the concept of reality and what can be thought to exist, but also basic epistemological theory based on the concepts of knowledge, truth and different forms of knowing.
- Basic scientific theory and concepts in science. Comparison between research methods and traditions in the humanities, social sciences and natural sciences.
- Ethics, not only different ethical views and normative ethical theories dealing with what is right and not right, but also what distinguishes a good life, and also social philosophy which deals with what is equitable and what typifies a good society. Examples of the application of theories from private life, societal life, cultural life and science.
- Current philosophical trends. Different philosophical approaches characterising current discussions on existential issues, ethics, society, language, science and reality.
- Philosophical aspects of gender issues and issues concerning sustainable development.
- Language philosophy. Basic concepts e.g. interpretation, qualification and definition.
- Theories about the function and meaning of language. Analysis of concepts and
- arguments both from language philosophy and logical understanding of the structure of arguments.

Italian National Curriculum - Scuola Italiana Madrid

What characterizes Philosophy teaching in the Italian school system is the historical approach, because of the influence of idealism and historicism in Italian culture. Philosophical topics are studied from an historical point of view, focusing on the historical context of ideas and thoughts. In the latest years a new didactical approach has been introduced beside the traditional one, based on a thematic approach. One topic or one problem is studied, but in any case through its historical development.

In the last three years of the curriculum students study:

1. Ancient and Middle Ages Philosophy
2. Modern Philosophy
3. Contemporary Philosophy

Main learning objectives and requirements for each of the three years

Students are expected to know the most important philosophical movements and authors, to understand and use the philosophical language, to develop a critical thinking, to be able to express themselves using arguments and dialogue in order to take part to the multicultural and democratic society.

Italian National Curriculum - Liceo Moro

3rd year: the ancient Greek philosophy (in particular: Socrates, Plato, Aristoteles); medieval philosophy (in particular, Augustine of Hippo; Thomas Aquinas)

4th year: modern philosophy between the scientific revolution, rationalism, and empiricism (in particular: Galilei; Descartes, Hume, Kant); the political thought (in particular Hobbes, Locke, Rousseau); the Enlightenment and the Romantic thought (Hegel).

5th year (graduation year): Hegel's heritage and reactions to his philosophy (Schopenhauer, Kierkegaard, Marx); the philosophy of Positivism; Nietzsche's irrationalism; Freud and the psychoanalysis; some authors of the 20th century.

Main learning objectives and requirements for each of the three years

The following learning objectives start in the third year in order to be gradually achieved at the end of the last year. At the end of the three years the students will be able to:

- Get acquainted with the peculiarity of philosophical knowledge
- Learn to understand and express the ideas and the systems of thought
- Develop personal reflexions and critical thought
- Be able to read a philosophical text and to understand its main topics
- Be able to use the specific vocabulary of the discipline
- Be able to connect the philosophical topics/philosophical currents with other disciplines
- Contextualize the authors' thought in their historical period
- Understand the philosophical and historical roots of the main philosophical currents of thought

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

Note: in black: the Swedish curriculum; in blue the Italian one; in red: other elements added by the Spaniard colleague. Remember that Italian and Spanish curricula are more or less the same. Since the Swedish curriculum is thematic, whereas the other two are historical, we tried to pick up the authors and themes that would better fit in the proposed themes.

Existence and knowing, not only basic theories dealing with the concept of reality and what can be thought to exist, but also basic epistemological theory based on the concepts of knowledge, truth and different forms of knowing.

Some authors who dealt thoroughly with the problem of knowledge and reality

- Plato, Parmenides, Aristotle (3rdrd year)
- Descartes (rationalism), Locke and Hume (empiricism), Kant (4thth year)
- Wittgenstein (5thth year)
- 5th year: Realism, objectivism, idealism and phenomenology

Basic scientific theory and concepts in science. Comparison between research methods and traditions in the humanities, social sciences and natural sciences.

Possible themes:

- The birth of the scientific method and the scientific revolution (from Copernicus to Newton, passing through Galilei) – 4thth year
- Karl Popper thought about science; the post-Popperian philosophy of science – 5thth year

Ethics, not only different ethical views and normative ethical theories dealing with what is right and not right, but also what distinguishes a good life, and also social philosophy which deals with what is equitable and what typifies a good society. Examples of the application of theories from private life, societal life, cultural life and science.

Some authors who dealt with ethics:

- Socrates Plato and Aristotle on ethics (3rdrd year)
- 3rd year: The ethical aim of Hellenistic philosophy
- Hobbes, Locke, Montesquieu, Rousseau, J.S. Mill on liberty, commonwealth, social contract, justice and injustice (4thth year)
- Nietzsche and the refusal of the common moral values; Rawls on justice (5thth year)
- 5th year: the primacy of ethics over ontology (Lévinas)

Current philosophical trends. Different philosophical approaches characterising current discussions on existential issues, ethics, society, language, science and reality. Philosophical aspects of gender issues and issues concerning sustainable development. **NO common elements found.**

Language philosophy. Basic concepts e.g. interpretation, qualification and definition. Theories about the function and meaning of language. Analysis of concepts and arguments both from language philosophy and logical understanding of the structure of arguments.

- 5th year: pragmatics of language
- 5th year: Being as Language (Heidegger)

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF POSSIBLE COMMON ELEMENTS.

Note: the objectives enlisted with a number are the Swedish ones; the objectives listed with a point are the Italian/Spanish ones; we tried to put them together according to the school year of attendance. The first year is intended for Sweden and Spain; the second is the Italian equivalent.

2nd/3rd year

1) Knowledge of the main characteristics of different views of reality and different ways of viewing knowledge.

2) Knowledge of ethics, different ethical viewpoints, and normative ethical theories, and also their application.

- Get acquainted with the peculiarity of philosophical knowledge
- Learn to understand and express the ideas and the systems of thought
- Be able to read a philosophical text and to understand its main topics

3rd/4th year

2) Knowledge of theoretical views in science and scientific methods.

3) Knowledge of ethics, different ethical viewpoints, and normative ethical theories, and also their application.

5) The ability to identify philosophical issues, and also to analyse, explain and determine a position on classical and contemporary philosophical questions and theories using relevant concepts.

- Contextualize the authors' thought in their historical period
- Understand the philosophical and historical roots of the main philosophical currents of thought
- Be able to connect the philosophical topics/philosophical currents with other disciplines
- Develop personal reflexions and critical thought

PROPOSED TOPICS/CONTENTS.

MODULE 1: EXISTENCE AND KNOWING (A)

Year 2/3. Teaching hours: 10

Description

- Early philosophers and the "physical" approach to reality
- Heraclitus: the permanence of the becoming
- Parmenides: the permanence of being as the only possible form of knowledge
- Pythagoras and the mathematical explanation of the reality
- Democritus and the materialistic explanation of reality

Learning objectives

- To understand the first attempts to explain reality by the early philosophers (the attempts to explain nature with nature)
- To understand what we mean for "reality"
- How we can know "reality"
- First approach to the philosophical language and way of reasoning

Materials

Heraclitus' aphorisms and fragments; Parmenides' "On nature"; Pythagoras' aphorisms and fragments; Democritus' aphorisms and fragments.

MODULE 2: EXISTENCE AND KNOWING (B)

Year 2/3. Teaching hours: 20

Description

- Classic philosophers and the primacy of metaphysics
- Plato: the cave myth; the 2 ontological levels of reality; truth and opinion; sensorial experience vs. ideal knowledge

Learning objectives

- To understand the passage from "physical" to "metaphysical" explanation.
- To consolidate the difference between sensorial and rational knowledge.
- To understand that (mainly in Aristotle's thought) even physics is a part of metaphysics.
- New answers to the questions "What is truth?"
- To become more acquainted with the philosophical specific language and way of reasoning

Materials

Plato's Republic

MODULE 3: EXISTENCE AND KNOWING (C)

Year 2/3. Teaching hours: 20

Description

Classic philosophers and the primacy of metaphysics

- Aristotle: substances, accidents, categories; Aristotle's physics; Aristotle's Metaphysics

Learning objectives

- To understand the passage from "physical" to "metaphysical" explanation.
- To consolidate the difference between sensorial and rational knowledge.
- To understand that (mainly in Aristotle's thought) even physics is a part of metaphysics.
- New answers to the questions "What is truth?"
- To become more acquainted with the philosophical specific language and way of reasoning

Materials

Aristotle's Physics; Aristotle's Metaphysics.

MODULE 3: EXISTENCE AND KNOWING (C)

Year 2/3. Teaching hours: 20

Description

Classic philosophers and the primacy of metaphysics. Aristotle: substances, accidents, categories; Aristotle's physics; Aristotle's Metaphysics.

Learning objectives

- To understand the passage from "physical" to "metaphysical" explanation.
- To consolidate the difference between sensorial and rational knowledge.
- To understand that (mainly in Aristotle's thought) even physics is a part of metaphysics.
- New answers to the questions "What is truth?"
- To become more acquainted with the philosophical specific language and way of reasoning

Materials: Aristotle's Physics; Aristotle's Metaphysics.

MODULE 4: EARLY AND MEDIEVAL PHILOSOPHY OF LANGUAGE
Year 2/3. Teaching hours: 16
Description
- Parmenides: the identity between language, thought, reality
- Gorgias and the Sophists
- Socrates: the search for the definition
- Plato: the dichotomy method
- Aristotle's logic
- Stoicism and logic
- The medieval dispute about the "universales"

Learning objectives
- To understand what is a good definition
- To understand how we classify the world
- To understand the problematic relationship between language, thought, reality

Materials
Gorgias' Helen's Praise; the paradoxical theses; Plato's Eutyphron; Plato's Sophist; Aristotle's Logic; Sextus Empiricus' logic; Selected texts from William of Ockham, Roscelinus, of Compiègne, William of Champeaux, Pierre Abélard, Thomas Aquinas.

MODULE 5: THE SCIENTIFIC REVOLUTION
Year 3/4. Teaching hours: 15
Description
- Aristotle's cosmology
- Copernicus' heliocentric system
- Tycho Brahe and his compromise system
- Kepler's platonic view and Kepler's laws
- Galileo and the birth of the scientific method
- Newton systematization
- Popper and post popperian interpretations of the scientific theory changes

Learning objectives
- To understand basic scientific theories and concepts in science.
- Comparison between research methods and traditions in the humanities, social sciences and natural sciences.
- To understand how and why scientific theories change over time, and why they are accepted or not.

Materials
- Reprise of Aristotle's Physics,
- Selected texts from: Copernicus De Revolutionibus orbium coelestium, Images of Tycho Brahe's system
- Selected texts from: Kepler, Mysterium cosmographicum; Kepler's laws in the physics textbook; Galilei, Dialogo sui due massimi sistemi del mondo; Newton, Principia mathematica philosophiae naturalis
- Selected texts from Popper, Kuhn, Lakatos

MODULE 6: PHILOSOPHY OF POLICY AND ETHICS
Year 3/4. Teaching hours: 12
Description
Views about the social contract, the commonwealth, the human rights
- Hobbes and the need for an absolute monarchy
- Locke on liberalism and religious toleration
- Montesquieu: the nature and principles of a government
- Rousseau: the social contract, the "good savage" myth, private property and technological development as the sources of injustice
- Mill and liberalism

Learning objectives
- To understand why men are social animals
- To understand the differences between the state of nature and a civil state
- To understand the different aspects of the concept of freedom

Materials
Selected texts from: Hobbes, Leviathan; Locke, Two treatises on government; Locke, Letter on toleration; Montesquieu, The spirit of laws; Rousseau, The social contract; Mill, On Liberty.

MODULE 7: EXISTENCE AND KNOWING (D)
Year 3/4. Teaching hours: 10
Description
- Where does our knowledge come from?
- Cartesian rationalism and the dichotomy between res cogitans and res extensa
- Locke's empiricism
- Hume's skepticism

Learning objectives
- To understand our different way to approach reality
- To understand the concept of "phenomenon"
- To be acquainted to the fact that "what we see is not always what we get"

Materials
Selected texts taken from: Descartes, Metaphysical meditations; Locke, Essay concerning human understanding; Hume, A Treatise of human nature.

MODULE 8: EXISTENCE AND KNOWING (E)
Year 3/4. Teaching hours: 10
Description
Where does our knowledge come from?
- Kant: the Critique of Pure Reason and the limits to our knowledge

Learning objectives
- To understand our different way to approach reality
- To understand the concept of "phenomenon"
- To be acquainted to the fact that "what we see is not always what we get"
- To develop a critical thinking for being able to choose between two opposite explanatory models
- To become able to argue and to support a thesis

Materials
Kant, Critique of the pure reason

MODULE 9: DO WE NEED KNOWLEDGE FOR A RIGHT AND GOOD LIFE?
Year 3/4. Teaching hours: 12
Description
Ethics, not only different ethical views and normative ethical theories dealing with what is right and not right, but also what distinguishes a good life, and also social philosophy which deals with what is equitable and what typifies a good society. Examples of the application of theories from private life, societal life, cultural life and science.

Learning objectives
- To understand the difference and the relationship between theoretical and practical life
- To understand the concepts of "virtue", "passion", "moral law"
- To understand the moral meaning of any theory, act and situation
- To develop a critical thinking about different ways of living
- To become able to argue and to support a thesis in moral field

Materials
Descartes, the provisional ethics; Spinoza, Ethica; Kant, Critique of Practical reason

4.5 ENGLISH
NATIONAL CURRICULA

Swedish National Curriculum - Folkungaskolan

The English language surrounds us in our daily lives and is used in such diverse areas as politics, education and economics. Knowledge of English increases the individual's opportunities to participate in different social and cultural contexts, as well as in global studies and working life. Knowledge of English can also provide new perspectives on the surrounding world, enhanced opportunities to create contacts, and greater understanding of different ways of living.

Aim of the subject. Teaching of English should aim at helping students to develop knowledge of language and the surrounding world so that they have the ability, desire and confidence to use English in different situations and for different purposes. Students should be given the opportunity, through the use of language in functional and meaningful contexts, to develop all-round communicative skills. These skills cover both reception, which means understanding spoken language and texts, and production and interaction, which means expressing oneself and interacting with others in speech and writing, as well as adapting their language to different situations, purposes and recipients. Through teaching students should also be given the opportunity to develop correctness in their use of language in speech and writing, and also the ability to express themselves with variation and complexity.

In addition, students should be given the opportunity to develop their ability to use different strategies to support communication and to solve problems when language skills are inadequate. Students should be given the opportunity to develop knowledge of living conditions, social issues and cultural features in different contexts and parts of the world where English is used. Teaching should encourage students' curiosity in language and culture, and give them the opportunity to develop plurilingualism where skills in different languages interact and support each other. Teaching should also help students develop language awareness and knowledge of how a language is learned through and outside teaching contexts.

Teaching should as far as possible be conducted in English. In teaching students should meet written and spoken English of different kinds, and relate the content to their own experiences and knowledge. Students should be given the opportunity to interact in speech and writing, and to produce spoken language and texts of different kinds, both on their own and together with others, using different aids and media.

Teaching should make use of the surrounding world as a resource for contacts, information and learning, and help students develop an understanding of how to search for, evaluate, select and assimilate content from multiple sources o information, knowledge and experiences.

Teaching in the subject of English should give students the opportunities to develop he following:

- Understanding of spoken and written English, and also the ability to interpret content.
- The ability to express oneself and communicate in English in speech and writing.
- The ability to use different language strategies in different contexts.
- The ability to adapt language to different purposes, recipients and situations.
- The ability to discuss and reflect on living conditions, social issues and cultural features in different contexts and parts of the world where English is used.

Courses in the subject

- English 5, 100 credits, which builds on knowledge from the compulsory school or equivalent.
- English 6, 100 credits, which builds on the course English 5.
- English 7, 100 credits, which builds on the course English 6.
- English 5

Main learning objectives and requirements for each of the three years

Teaching in the course should cover the following core content:

Content of communication

- Subject areas related to students' education, and societal and working life; current issues; events and processes; thoughts, opinions, ideas, experiences and feelings; relationships and ethical issues.
- Content and form in different kinds of fiction.
- Living conditions, attitudes, values and traditions, as well as social, political and cultural conditions in different contexts and parts of the world where English is used. The spread of English and its position in the world.

Reception

- Spoken language, also with different social and dialect features, and texts that instruct, relate, summarise, explain, discuss, report and argue, also via film and other media.
- Coherent spoken language and conversations of different kinds, such as interviews.
- Literature and other fiction.
- Texts of different kinds and for different purposes, such as manuals, popular science texts and reports.
- Strategies for listening and reading in different ways and for different purposes.

- Different ways of searching for, selecting and evaluating texts and spoken language.
- How words and phrases in oral and written communications create structure and context by clarifying introduction, causal connection, time aspects, and conclusions.

Production and interaction
- Oral and written production and interaction of various kinds, also in more formal settings, where students instruct, narrate, summarise, explain, comment, assess, give reasons for their opinions, discuss and argue.
- Strategies for contributing to and actively participating in discussions related to societal and working life.
- Processing of their own and others' oral and written communications in order to vary, clarify and specify, as well as to create structure and adapt these to their purpose and situation. This covers the use of words and phrases that clarify causal connections and time aspects.

Italian National Curriculum - Scuola Italiana Madrid

The National Curriculum for English language and culture is focussed on the gradual learning of the English language based on the progressive building up of the vocabulary and on the acquisition and consolidation of grammatical and syntactical structures that aim at the improvement of students' oral communication and written skills so that they can eventually achieve a B2/C2 level at the end of 12th grade. In 10th grade, the study of grammar and vocabulary is carried out parallel to the introduction of English history and literature. In 11th grade, students analyse the context and the most representative authors and texts pertaining to the history and literature from the Elizabethan Age to the 18th century. In 12th grade, students are expected to attain a higher degree of autonomy and a critical, personal and interdisciplinary approach to the context and texts analysed that cover the history and literature of the second half of the 18th century to the 20th century in England.

Main learning objectives and requirements for each of the three years

From 10th to 12th grade, by gradually improving and consolidating their knowledge of the English language, students have to achieve both written and oral fluency and accuracy aimed at understanding, analysing and elaborating critically on the historical contexts, literary texts and current issues they deal with, at researching and presenting topics autonomously and at interacting and arguing in debates.

Italian national Curriculum - Liceo Moro

General aim of all Upper Secondary English courses in the Licei is to lead students to reach B2 level. English is taught in 3-4 hours (55' or 60') a week to classes ranging from 18 to 28 students, with an average of 23, all through the year. Students in Liceo Linguistico courses have Native Speakers as a further resource for 1 hour a week.

Students are stimulated to learn:
- Rich and articulate vocabulary about current and personal topics.
- Complete upper-intermediate level (B2) grammar.
- Correct pronunciation.
- Awareness of text typology: story-telling, review, essay, description of event or person.
- Pragmatics appropriate to context.
- Social and cultural elements of English-speaking countries: schools, forms of government, geography, etc.
- Profile of English history, with closer analysis of periods.
- Profile of English literature, with closer analysis of periods, movements or authors.

Main learning objectives and requirements for each of the three years

Students are gradually trained to:
- Fully understand what is said or written in standard language, both on familiar and unfamiliar topics normally met in study, everyday life and social relations, if not affected by excessive idioms or noise.
- Understand the main points in arguments, concrete or abstract, even conceptually and linguistically complex but familiar and structurally well-organized.
- Read autonomously, applying different strategies and adapting style and speed to text-typology and aim.
- Find clues and make inferences, develop potential solutions to complex problems.
- Improving fluency and mastery in communication about a wide range of topics, personal and academic.
- Improving awareness of register as suited to context.
- Use reference sources as grammar books, dictionaries and the Web to acquire solid information.
- Express views about facts and experiences, supported by clear and well-organized explanations and arguments, recurring to examples and acquired information.

- Participate actively in discussions about both routine and non-routinary topics, contributing and cooperating in making decisions.
- Report detailed information, describe procedures, summarize data taken from different sources.
- Cooperate in group and multicultural contexts.
- Develop self-evaluation and self-help strategies, consolidating motivation.
- Master specific language, expressive and argumentative tools to manage communication in contexts different from ordinary.
- Develop analytic knowledge of historical, literary and cultural phenomena in the English-speaking world, past and contemporary.
- Reinterpret cultural issues in terms of active citizenship. Develop cross-curricular connections.

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

We believe the real differences in the national and school curricula for English are more visible in the way the teaching and learning of English is organized in the 3 countries rather than in content and learning objectives.

The Italian and Swedish curricula share a basis of 85 to 96 hours of English a year (3 per week), while the Spanish-Italian curriculum offers 2 hrs per week for a total amount of 66. Due to a number of reasons, none of the 3 courses ever reaches the expected quota of hours.

All our classes are taught to mixed-ability groups, from B1 to B2, with B2 expected to be final level for nearly all students. Groups range from 12 to 32 students. Native speakers are provided only in the Italian classes of Liceo Linguistico.

English is compulsory subject all through the Italian and Italian-Spanish Liceo, while it can become complementary subject in the Swedish system in the final year.

The general aim of English in the curricula is the same: 1) achieving mastery in the use of English as an instrument for study and professional career, and: 2) exploring the contribution of English-speaking countries to the global culture. Contents may vary from history and literature to science and current topics, focusing on personal views and in connection with the student's experience.

A further comparison on methodology will be possible with further analysis of how classes and self-access activities performed by students are managed, hopefully in presence. We also believe a comparison of assessment procedures will yield interesting results.

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF POSSIBLE COMMON ELEMENTS.

Learning objectives for B1 and B2 levels:
- Express yourself in spoken and written communication.
- Understand spoken and written English in various genres and in more formal contexts.
- Use strategies to search for relevant information and assess the reliability of different sources.
- Oral and written production and interaction of various kinds, also in more formal settings, where students instruct, narrate, summarise, explain, comment, assess, give reasons for their opinions, discuss and argue.
- Living conditions, attitudes, values and traditions, as well as social, political and cultural conditions in different contexts and parts of the world where English is used. The spread of English and its position in the world.
- Foster skills such as text analysis and comprehension of a seminal work in English literature, exploration of the historical context in which the author wrote it and of his novel critical and representational mode.
- Establish and suggest differences and connections between diverse literary and historical contexts and current times.
- Build up vocabulary pertaining to different registers and contexts.

PROPOSED TOPICS/CONTENTS.

MODULE 1: BEING YOUNG

Year 1 Sweden, year 2-3 Spain, year 3 italy. Teaching hours: 10-15

Description

Pretend you are an exchange student from an English-speaking country. Find information in relevant and reliable sources and present to the class. The presentation should give a good overall picture of what it is like to be young in your country (family, school, spare time, chores, food, religion, politics, basic facts about your country and so on).

Learning objectives

Living conditions, attitudes, values and traditions, as well as social, political and cultural conditions in different contexts and parts of the world where English is used. The spread of English and its position in the world.

Different ways of searching for, selecting and evaluating texts and spoken language.

Oral and written production and interaction of various kinds, also in more formal settings, where students instruct, narrate, summarise, explain, comment, assess, give reasons for their opinions, discuss and argue.

Materials

Written and spoken material on living conditions, politics, history, school system, hobbies, food, religion etc (national newspapers, embassy, tourist information and so on).

MODULE 2: GLOBAL ISSUES

Year 2/3 Spain and Sweden, year 3/4 Italy. Teaching hours: 10 -15

Description

Define a global issue (problem) and describe the current situation by facts and examples. Use English sources. Suggest solutions both done in society and on an individual level. Add discussion questions for the class to be discussed before, during or after your presentation. Examples of issues: consumerism, sustainable energy, mental health, global pandemic, poverty, gender equality, democracy etc.

Learning objectives

Understand spoken and written English in various genres and in more formal contexts

Use strategies to search for relevant information and assess the reliability of different sources

Express yourself in spoken and written communication.

Material

TED-talks, newspapers, relevant websites

MODULE 3: MOVING FORWARD

Year 2 Spain and Sweden, year 3/4 Italy. Teaching hours: 10-15

Women's role from Geoffrey Chaucer's "The Wife of Bath's Tale" to 21st century society

Description

Analysis of Geoffrey Chaucer's portrayal of the Wife of Bath in his work The Canterbury Tales as an innovative representation of a woman in the late Middle Ages transitioning to 15th century England, and reflections on women's role in 21st century society both in Western countries and in political contexts in which women still claim the recognition of their basic rights.

Learning objectives

Fostering skills such as text analysis and comprehension of a seminal work in English literature, exploration of the historical context in which the author wrote it and of his novel critical and representational mode; establishing and suggesting differences and connections with current times in relation with women's role in society; researching and proposing material autonomously, debating and interacting orally in class, listening comprehension (videos, speeches and interviews), building up vocabulary within the lexical field of women's rights and gender discrimination, substantiating viewpoints in written English.

Material

Textbook and photocopiable resources, articles from online English press (BBC, "The Guardian", etc.), podcasts, TED-talks, relevant videos and interviews.

MODULE 4: "AND YET IT MOVES"

Year 3 Spain, year 2 Sweden, year 4 Italy). Teaching hours: 15-20

From the Scientific Revolution in the 16th and 17th centuries to 21st century A.I. in society, thought and literature.

Description

Exploration of the impact the Scientific Revolution had on society and thought in the 16th and 17th centuries and reflections on both the social progress and the drawbacks technology brought about in significant historical periods such as the 18th

and the 19th centuries (i.e. the Industrial Revolution) and the end of the 20th and the beginning of the 21st century with the groundbreaking introduction of the internet and the development of A.I.. How have writers viewed scientific and technological research in their works? And how have they shaped their stories by questioning its ethical implications?

Learning objectives

Enhancing skills such as analyzing historical changes within certain fields that trigger a ripple effect on others, drawing parallels between different historical periods and evaluating both recurring patterns and diverse outcomes, building up vocabulary which pertains to the scientific and IT sector, debating issues orally from various perspectives, expanding on certain viewpoints in written essays, exploring the distinctive modes of representation and languages employed in literature and cinema, listening comprehension.

Material

Textbook and photocopiable resources (extracts from Mary Shelley's Frankenstein, Isaac Asimov's I Robot and Kazuo Ishiguro's Klara and the Sun), articles from the British and American press, films (Ridley Scott's "Blade Runner" and Stephen Spielberg's "AI"), interviews and Ted-talks.

MODULE 5: INTRODUCING SHAKESPEARE

Year 3/4 Italy, year 1/2 Sweden, year 2/3 Spain) Teaching hours: 15-25

Learning objectives

To understand the cultural context in which WS was a creative genius; to understand the communicative situation of his theatre; to understand why his plays adapted for cinema or modern theatre still appeal to large audiences; to be able to write a review; to learn about rhythm in spoken English...

Material

Extracts from Shakespeare's works (R&J, McBeth, Hamlet, Midsummer Night's, Merchant of Venice) in comparison with their modern film adaptations; cultural pages on the Web or the textbook in use; when possible, visit to a theatre for a performance.

MODULE 6: PROMOTE YOURSELF!

(I year 3-4, S year 1-2, E year 2-3) Teaching hours: 10-20

Possible interaction with Civic Education or other Languages studied.

Learning objectives: to acquire more awareness of desires, fears, strong points and areas of weakness for further work; to learn about the world of work and some of its themes; to learn how to write a CV and a Cover Letter; to learn how to conduct a job interview.

Material

Realia, web materials and tutorials, simulations.

MODULE 7: THE ENVIRONMENT

Year 3/4 Italy, year 1-2 Sweden, year 2-3) Spain. Teaching hours: 5-10

Possible interaction with Science.

Learning objectives

To know about current environmental issues; to decode a text in scientific English (reading); to understand a conference or spoken discourse meant for divulgation (Listening); to become aware of personal responsibilities.

Material

Textbook in use; materials from the Web.

MODULE 8: EFFECTS OF CLIMATE CHANGE ON HUMAN ECONOMY AND BEHAVIOUR (DEPRESSION AND UNEMPLOYMENT)

Year 3/4 Italy, year 1/2 Sweden, year 2/3 Spain. Teaching hours: 10-15

Description

Starting from John Steinbeck's The Grapes of Wrath, we can study the consequences of the Dust Bowl, such as depression and unemployment, in connection with the possible negative climate developments caused by today's gas emissions, ice melting, global warming and desertification of many areas, civic education on how to get rid of plastic and other dangerous materials.

Learning objectives

Solicit a discussion on the environment in which future generations will find themselves, interaction with civics, writing an essay about a situation of poverty caused by economic depression and how to avoid it by exploiting new technologies and renewable energies.

Material

The Grapes of Wrath by Steinbeck and the film, music: Bruce Springsteen, the album The Ghost of Tom Joad, documents about the Dust Bowl, TED talks (Technology Entertainment Design) conferences in the internet, articles on the current climate situation and on the world economic situation following the pandemic, statistics and materials from the web.

MODULE 9: A HISTORY OF THE PANDEMICS IN LITERATURE AND THE NEW WORDS AND EXPRESSIONS IN THE ENGLISH LANGUAGE FOLLOWING THE PANDEMIC.

Year 3-4 Italy, Sweden year 1/2, Spain year 2/3. Teaching hours: 10-20

Description

Starting from literature by reading chapters of Jack London's The Scarlet Plague. References to the Black Death of the middle-ages shaping human history for centuries, to the conquest of the New World and the spreading of diseases among the indigenous population. Other references to Boccaccio, Chaucer, Defoe, E. A.- Poe, Camus, Marquez.

Learning objectives

A language update for students, awareness of the significance of epidemics in the evolution of history, how deeply rooted fears can modify human behaviour a way to exorcise the fear of pandemic, learning how new words in the English language have formed after 2020 (social distancing, care-Mongering...).

Materials

Books by Jack London (The Scarlet Plague), Boccaccio (Decameron), Chaucer (Canterbury Tales), Defoe (A Journal of the Plague Year), Poe (The Masque of the Red Death), Camus (The Plague). BBC learning English websites, articles on magazines (Speak-up, Storica/National Geographic...), research on the internet.

MODULE 10: WAR, PACIFISM AND EVOLUTION OF MENTALITY AND TECHNOLOGY IN THE 20TH CENTURY AND REFLECTIONS ON THE YOUNG GENERATION OF THE PRESENT.

Year 3-4 Italy, year 1/2 Sweden , year 2/3 Spain. Teaching hours: 15-20

Description

Starting from The Waste Land by T.S. Eliot, from chaos and sterility to fertility emerging from the teachings of the past and myth, we analyze the changing of methods, techniques, habits and mentality in society and literature in connection with what is shaping the new Generation Z of young people born 1996-2015 (the internet, social media, the War on Terror, Covid-19, Black lives Matter...).

Learning objectives

Analysis of the repetition of events in history, learning the parallels between different historical periods and mentalities, enhancing skills such as text analysis and comprehension of a seminal work in English literature, exploration of the historical context in which the author wrote his/her novels or poems; establishing and suggesting differences and connections with current times and the new historical problems, the importance of the new music in giving a new mental shape and social conscience.

Materials

The Road by Jack Kerouac, the influence of the new music, rock and protest music (Woodstock...) of the sixties and the seventies, The Viet-Nam war in relationship with the wars in Iraq, Afghanistan and Syria of the beginning of the 21st millenium, films (Apocalypse Now, American Sniper...), articles on magazines (Speak-up, Storica/National Geographic...).

4. 6 SPANISH
NATIONAL CURRICULA

Swedish National Curriculum - Folkungaskolan

Modern languages is a subject that may include a large number of languages. These may differ widely in terms of everything from written form and pronunciation to their growth and use in diverse contexts such as everyday life, culture, politics and education. Proficiency in several languages increases opportunities for individuals to be part of different social and cultural contexts, and participate in study and working life globally. Knowledge of modern languages may also provide new perspectives on the world, improved opportunities for contacts and greater understanding of different ways of living.

Aim of the subject. Teaching in the subject of modern languages should aim at helping students develop knowledge of the target language and the surrounding world, and confidence in their ability to use the language in different situations and for different purposes. Students should be given the opportunity, through using language in functional and meaningful contexts, to develop all-round communicative skills. These skills cover both reception, which means understanding the target language in speech and writing, and production and interaction, which means expressing themselves and interacting with others in speech and writing, and adapting their language to different situations, purposes and recipients. Teaching should also give students the opportunity to develop correctness in their use of language, and also the ability to express themselves with variation and complexity. Students should also be give the opportunity to develop their ability to use different strategies to support communication and to solve problems when language skills are inadequate. Students should be given the opportunity to develop knowledge about living conditions, societal issues and cultural phenomena in different contexts and areas where the language is used. Teaching should stimulate students' curiosity in language and culture, and give them the opportunity to develop multilingualism where skills in different languages interact and reinforce each other. Teaching should also help students develop language awareness, and knowledge of how language is learned both inside and outside the classroom. Teaching should, to the greatest extent possible, be carried out in the target language. Teaching should give students the opportunity to become familiar with different kinds of spoken and written language, and relate content to their own experiences and knowledge. Students should be given the opportunity to interact in speech and writing, and produce spoken language and texts of different kinds, both on their own and together with others, using different aids and media. Teaching should take advantage of the surrounding world as a resource for contacts, information and learning, and help students develop their understanding of how to search for, assess, select and acquire content from multiple sources of information, knowledge and experiences. Teaching in the subject of modern languages should give students the opportunities to develop the following:

1. Understanding of the target language in speech and in writing, and the ability to interpret content.
2. The ability to express oneself and communicate in the target language in speech and writing.
3. The ability to use different language strategies in different contexts.
4. The ability to adapt language to different purposes, recipients and situations.
5. The ability to discuss and reflect on living conditions, societal issues and cultural.

phenomena in different contexts and areas where the language is used.

Courses in the subject

Modern languages 1–7, all of them 100 credits

Main learning objectives and requirements for each of the three years

Core content. Teaching in the course should cover the following core content:

Content of communication

- Personal information; subject areas familiar to students; interests, everyday situations, people and places; opinions and feelings.
- Daily life and lifestyles in different contexts and areas where the language is used.

Reception

- Clearly spoken language and simple texts which are instructive, descriptive and communicative, also via different media and in combination with illustrations, e.g. film.
- Dialogues and discussions.
- Narratives and other fiction, also in spoken or dramatized form, as well as songs.
- Information and messages, e.g. signs and advertisements.
- Strategies for understanding key words and drawing conclusions about content, e.g. by means of pre-understanding.
- Different ways of searching for and selecting texts and spoken language from the internet and other media.
- Language skills, e.g. pronunciation, intonation and spelling in the language the students encounter.
- How words, fixed language expressions and everyday phrases are used in spoken language and texts in different situations.

Production and interaction
- Presentations, instructions, messages and descriptions in coherent speech and writing.
- Speaking and writing for contact and communication.
- Strategies for solving language problems in conversation, e.g. reformulations, gestures and questions.
- Language correctness in terms of e.g. pronunciation, intonation, words, polite phrases and other fixed language expressions.

Italian National Curriculum - Scuola Italiana Madrid
2nd Lyceum (4th ESO)
- The different levels of the language
- Syntactic analysis: simple sentence, compound sentence and complex sentence
- Text analysis: definition of text and mechanisms of textual cohesion
- Types of text: argumentative text (essay, debate, and speech), journalistic text and advertising text.
- Castilian literature in the 15th century: The Pre-Renaissance.
- The Golden Age (XVI-XVII centuries): Renaissance, Mannerism and Baroque.

3rd Lyceum (1st Baccalaureate)
- Communication: sign and functions of language.
- The multilingual reality of Spain, the wealth of Spanish in America and the role of Spanish in the world.
- The literary use of the language: genres and literary figures.
- The literature of the 18th century: didacticism and neoclassical aesthetics.
- The literature of the XIX century: Romanticism and Realism.

4th Lyceum (2nd Baccalaureate)
- Textual typologies: academic, professional, informative, and creative texts
- The future of the Spanish language.
- Literature at the beginning of the 20th century: Modernism and Generation of 98.
- Novecentismo and vanguards.
- The Generation of 27.
- Literature during the Franco regime (1940-1975): internal and external exile.
- Literature in democracy and literary news at the turn of the century.
- The "Boom" of Latin American literature.

Main learning objectives and requirements for each of the three years
2nd Lyceum (4th ESO)
- Understand oral and written discourses in the various contexts of social and cultural activity.
- Use the language to express oneself in a coherent and adequate way in the various contexts of social and cultural activity, to become aware of their own feelings and ideas and to control one's behaviour.
- Know the multilingual reality of Spain and the varieties of Spanish and value this diversity as a cultural wealth.
- Use oral language in social and cultural activity in a way that is appropriate to the different situations and functions, adopting a respectful and cooperative attitude.
- Employ the various kinds of writings through which communication occurs with public, private, and working life institutions.
- Use the language effectively in school activities to research, select and process information and to write academic texts.
- Use with progressive autonomy and a critical spirit the means of social communication and information technologies to obtain, interpret and value information of various types and different opinions.

3rd Lyceum (1st BACCALAUREATE)
- Understand the mechanisms inherent to any communication process, its nature and operation.
- Distinguish the particularities of language as the way of human communication par excellence, in all its complexity and resources.
- Appreciate the specific characteristics of the signs that make up every language and differentiate them from non-linguistic signs.
- Differentiate each of the elements of the communicative process, its linguistic and non-linguistic circumstances, and the different codes that may be used.
- Understand, within the group of languages, the multilingual reality of Spain and the historical causes that originated it.
- Distinguish the characteristic features of Spanish, its diatopic variants and those of each of the languages spoken in the Peninsula, with their dialect, regional and local variants.

- Assess the importance of mastering the lexicon of a language as an essential basis for correct communication.
- Distinguish, in each of the lexical units, its polysemic capacity, of multiple denotative and connotative meanings.

4th Lyceum (2nd BACCALAUREATE)

- Synthesize orally and in writing texts of different types and different levels of formalization, pointing out the main and secondary ideas and the communicative intention, recognizing possible inconsistencies or ambiguities and providing an opinion.
- Consult sources of various types and integrate their information into synthesis texts that present the main data and the different points of view, their relationships, and their own perspective.
- Interpret and assess specific written texts (humanistic, journalistic, scientific, literary, etc.) analysing their internal construction and the author's relationships with the text and the work.
- Create written texts of different types appropriate to the communication situation, using mechanisms that give them coherence and cohesion and attending to their different formal structures.
- Understand the origin and development of the Spanish language, in its history and at the present time, evaluating its varieties.
- Distinguish the different constitutional languages of Spain, knowing their origin and evolution and assessing the situations of bilingualism.
- Know and identify the different varieties of Spanish (spatial, social and style) through direct observation.
- Identify the genre to which a literary text belongs and recognize its basic structural elements and linguistic resources.

Italian National Curriculum - Liceo Moro

During these three years student acquires linguistic-communicative skills corresponding at least to Level B1 of the Common European Framework of Reference for languages. In particular, the student consolidates its study method, transferring into the language skills and strategies acquired by studying other languages; produces oral and written texts (to report, describe, argue) and reflects on the formal characteristics of the texts produced in order to achieve acceptable linguistic competence. Moreover, the student deepens the aspects of culture related to the language of study; understands and analyzes short literary texts and other simple expressive forms of personal and social interest (current affairs, cinema, music, art, etc.), also with the use of new technologies; uses the foreign language for the study and learning of topics related to non-linguistic disciplines.

Main learning objectives and requirements for each of the three years

At the end of third year the student comprehensively and selectively understands oral and written texts on known topics relating to the personal and social sphere; produces linear and cohesive oral and written texts to report facts and describe situations inherent to nearby environments and personal experiences; participates in conversations and interacts in the discussion, even with native speakers, in a manner appropriate to the context; reflects on the system (phonology, morphology, syntax, lexicon, etc.) and on linguistic uses (functions, registers, etc.). During the following years, as part of the development of knowledge on the cultural universe relating to the foreign language, the student learns to understand and analyze aspects relating to the culture of the countries where the language is spoken, with particular reference to the social and literary sphere; moreover, analyzes simple oral, written, iconic-graphic texts on current affairs, literature, cinema, art, etc .; recognizes similarity and diversity between cultural phenomena of countries where different languages are spoken (e.g. foreign language culture vs Italian language culture)

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

Swedish Curriculum (Modern Languages 1-7, all 100 credits)

Communication:

- Search and use of thematic areas close to the students: particular interests, everyday situations, recognizable people and places, which give rise to the verbalization of personal opinions and the expression of individual feelings.
- Systematic use of everyday life and lifestyles in the different contexts and areas where the Spanish language is used.

Comprehension:

- Application of the use of a clear language in the classroom and of simple texts that are instructive, descriptive and communicative, in combination with illustrations or films.
- Encourage dialogue and debate in the classroom.
- Systematic recourse to narrative and, in general, to fiction (stories, short stories, etc.), also in spoken form (audiobooks), dramatized (theater) or sung (songs).
- Knowledge of the information and the message through advertising (signs, advertisements, slogan, etc.).
- Propose strategies to understand keywords and draw conclusions about the content (preunderstanding instruments).

- Search and selection of texts and forms of spoken and intermediate communication on the Internet and social networks.
- Enhance linguistic skills (pronunciation, intonation and spelling) through meeting with other schools.
- Practical reinforcement on the use of words, linguistic expressions, sentences and texts in different situations.

Production and interaction:
- Constant practice around expository, descriptive and instructive texts, both oral and written.
- Structuring the course always keeping in mind that the objective of a language such as Spanish is to contact and communicate with other people.
- Establish strategies to solve language problems in a conversation (reformulations, gestures, questions, etc.)
- Practical reinforcement of pronunciation, intonation, words, polite phrases and set phrases

Italian / Spanish Curriculum

2nd Lyceum (4th ESO)
- Appreciation of the use of language to express oneself in a coherent and appropriate way in the various contexts of social and cultural activity, to become aware of one's own feelings and ideas and to control one's own behavior.
- Correct placement of the oral language in social and cultural activity, in an appropriate way to different situations and functions and always adopting a respectful and cooperative attitude.
- Practices with the various kinds of writing through which communication with public and private institutions and working life takes place.
- Promote an effective use of language in school activity to search, select and process information, in order to write texts typical of the academic field.
- Use, counting on the progressive autonomy and critical spirit of the students, of social communication media and information technologies to obtain, interpret and evaluate information of various types and different opinions.
- Propose texts and documents that explain the historical evolution of the literary forms of the Siglo de Oro.
- Reading of the literary works of that period proposed by the Department of Language (El Lazarillo de Tormes, Don Quijote, etc.)

3rd LICEO (1st Baccalaureate)
- Adopt, on a regular basis, the use of the dictionary, seen as a support tool for learning the language.
- Encourage the habit of preparing written compositions of an expository nature as an ideal method of transmitting information, taking care of its correct writing and its adaptation to the communicative purpose.
- Work on the development of critical capacity through the analysis and elaboration of argumentative and expository texts.
- Employ techniques for searching, preparing and presenting information, using traditional media and new technologies.
- Propose texts and documents that explain the historical evolution of literary forms from the 18th to the 19th century.
- Reading of the literary works of that period proposed by the Department of Language (El sí de las niñas, Episodios Nacionales, La Regenta, etc.)

4th LICEO (2nd Baccalaureate)
- Encourage the production of written texts of different types appropriate to the communication situation, using mechanisms that give them coherence and cohesion and attending to their different formal structures.
- Build a didactic space for the different constitutional languages of Spain, knowing their origin and evolution, in order to assess situations of bilingualism.
- Practices to know and identify the different varieties of Spanish (spatial, social and style) through direct observation.
- Management of basic computer resources (word processors, spell checkers, databases,
- Internet, multimedia, etc.) and apply them to the search and processing of information.
- Systematic work with the analysis and comment of texts, as well as with the elaboration of academic works.
- Strengthen the knowledge of the most representative works and authors of 20th century literature in the various constitutional languages and within the broad lines of universal literature.
- Reading of the literary works of that period proposed by the Language Department (Azul, Niebla, Campos de Castilla, Bodas de Sangre, Yerma, El camino, Tiempo de Silencio, Cien años de soledad, etc.)

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF POSSIBLE COMMON ELEMENTS.

Objectives. The aim for the students is to develop their oral and written communicative skills as well as their receptive skills in the target language. The language studies should moreover give the students a deeper understanding of the cultures where the language is spoken and encourage them to make comparisons to their own culture.

In oral and written communications the students present, discuss, argue, describe and report on different topics. They reflect upon their productions and continuously work on improving their linguistic skills for greater correctness and variety. Students find sources of information through different aids and media and use different strategies to communicate and to adopt the language to different recipients and situations. Furthermore the students practise receptive skills by: reading texts of various kinds, both topics within their own interest and knowledge as well as literature from different time periods; listening to descriptions, fictional and non-fictional stories, reports, news and other sources, also through music and film. The final objective is that students at the end of the course feel confident in using the target language in different situations and for different purposes and that they will have greater knowledge and understanding for Spanish speaking cultures and the surrounding world.

Sweden. Teaching in the subject of modern languages should aim at helping students develop knowledge of the target language and the surrounding world, and confidence in their ability to use the language in different situations and for different purposes. Students should be given the opportunity, through using language in functional and meaningful contexts, to develop all-round communicative skills. These skills cover both reception, which means understanding the target language in speech and writing, and production and interaction, which means expressing themselves and interacting with others in speech and writing, and adapting their language to different situations, purposes and recipients. Teaching should also give students the opportunity to develop correctness in their use of language, and also the ability to express themselves with variation and complexity. Students should also be given the opportunity to develop their ability to use different strategies to support communication and to solve problems when language skills are inadequate. Students should be given the opportunity to develop knowledge about living conditions, societal issues and cultural phenomena in different contexts and areas where the language is used. Teaching should stimulate students' curiosity in language and culture, and give them the opportunity to develop multilingualism where skills in different languages interact and reinforce each other. Teaching should also help students develop language awareness, and knowledge of how language is learned both inside and outside the classroom. Teaching should, to the greatest extent possible, be carried out in the target language. Teaching should give students the opportunity to become familiar with different kinds of spoken and written language, and relate content to their own experiences and knowledge. Students should be given the opportunity to interact in speech and writing, and produce spoken language and texts of different kinds, both on their own and together with others, using different aids and media. Teaching should take advantage of the surrounding world as a resource for contacts, information and learning, and help students develop their understanding of how to search for, assess, select and acquire content from multiple sources of information, knowledge and experiences. Teaching in the subject of modern languages should give students the opportunities to develop the following:

1. Understanding of the target language in speech and in writing, and the ability to interpret content.
2. The ability to express oneself and communicate in the target language in speech and writing.
3. The ability to use different language strategies in different contexts.
4. The ability to adapt language to different purposes, recipients and situations.
5. The ability to discuss and reflect on living conditions, societal issues and cultural phenomena in different contexts and areas where the language is used.

Spain. During these three years student acquires linguistic-communicative skills corresponding at least to Level B1 of the Common European Framework of Reference for languages. In particular, the student consolidates its study method, transferring into the language skills and strategies acquired by studying other languages; produces oral and written texts (to report, describe, argue) and reflects on the formal characteristics of the texts produced in order to achieve acceptable linguistic competence. Moreover, the student deepens the aspects of culture related to the language of study; understands and analyzes short literary texts and other simple expressive forms of personal and social interest (current affairs, cinema, music, art, etc.), also with the use of new technologies; uses the foreign language for the study and learning of topics related to non-linguistic disciplines.

Italy. At the end of third year the student comprehensively and selectively understands oral and written texts on known topics relating to the personal and social sphere; produces linear and cohesive oral and written texts to report facts and describe situations inherent to nearby environments and personal experiences; participates in conversations and interacts in the discussion, even with native speakers, in a manner appropriate to the context; reflects on the system (phonology, morphology, syntax, lexicon, etc.) and on linguistic uses (functions, registers, etc.). During the following years, as part of the development of knowledge on the cultural universe relating to the foreign language, the student learns to understand and analyze aspects relating to the culture of the countries where the language is spoken, with particular reference to the social and literary sphere; moreover, thanalyzes simple oral, written, iconic-graphic texts on current affairs, literature, cinema, art, etc .; recognizes similarity and diversity between cultural phenomena of countries where different languages are spoken (e.g. foreign language culture vs Italian language culture)

PROPOSED TOPICS/CONTENTS.

MODULE 1: THE ARGUMENTATIVE TEXT: THE DEBATE AND THE SPEECH.

Year 1 Spain, year 3/4 Italy, year 4 Sweden;   Teaching hours: 10

Description:

- Introduction to the argumentative text
- Argumentative texts that share elements of the written and oral language (debates, speeches, gatherings, round tables and forums)
- Structure of the debate: presentation, body of the debate and conclusion and closing
- Structure of speech: clarity and order
- Its protagonists: moderator, interlocutor, speaker and audience

Learning objectives

- Preparation of a class debate on a topic of general interest. The class will be divided into groups of five speakers and a moderator
- Write and read a short speech, attending to the student's tastes and imagining a situation conducive to its pronunciation.

Materials

- Television debates on current affairs (www.rtve.es)
- Speeches given on the occasion of the delivery of the Princess of Asturias Awards (www.fpa, es)

MODULE 2: THE SPANISH NARRATIVE IN RECENT YEARS.

Year 1 Spain, year 3/4 Italy, year 4 Sweden; Teaching hours: 10

Description:

- Analyze the narrative elements present in a selection of fragments of novels by Antonio Muñoz Molina.
- Creation by groups of a mural or digital presentation about the author that includes biography, style, works and initial fragments of two of them

Learning objectives

- Analyze the narrative elements present in a selection of fragments of novels by Antonio Muñoz Molina.
- Creation by groups of a mural or digital presentation about the author that includes biography, style, works and initial fragments of two of them

Materials

- Antonio MUÑOZ MOLINA, El invierno en Lisboa, 1987
- Antonio MUÑOZ MOLINA, Beltenebros, 1989
- Antonio MUÑOZ MOLINA, El jinete polaco, 1992

MODULE 3: RESOURCES FOR AN ECO-SUSTAINABLE TOURISM.

Year 1 Spain, year 3/4 Italy, year 4 Sweden; Teaching hours: 10

Description:

- Learning about and distinguishing eco-sustainable destinations and resources: natural, cultural and historical
- Lexis and phraseology used to promote tourism in general and in comparison to eco-sustainable tourism promotion
- Lexis and phraseology for tour guides: written and spoken

Learning objectives

- reading and understanding information and documents about different resources for eco-sustainable tourism, such as travel destinations, guide books, weather, promotional materials in general
- writing a mini-guide to a mountain or coastal eco-friendly tour
- preparing and promoting a guided eco-friendly tour in your home town or region

Materials

- Written, spoken and photographic materials from reliable sources available on: textbook in use, books/guide books, newspapers and Internet

MODULE 4: CULTURE PROJECT ON ART AND PICTURES

Year 1 Spain, year 3/4 Italy, year 4 Sweden; Teaching hours: 10

Description:

- Learning about and distinguishing different kinds of graphic resources in art and contemporary Internet sites such as social media and advertising
- Lexis and phraseology used to describe different kinds of image and photos
- Lexis, phraseology and readings about graphic techniques evolution through history

Learning objectives

- Developing one's interpretation skills on graphic inputs by widening language and vocabulary in use
- Reading and understanding information and documents about different graphic resources: photos, images, pictures, shots, screenshots etc.
- Preparing a group and/or individual presentation about a topic presented through a graphic approach

Materials

- Written, spoken and photographic materials from reliable sources available on: textbook in use, books/guide books, newspapers and Internet

MODULE 5: CULTURE PROJECT (PROYECTO CULTURAL).

Year 1 Spain, year 3/4 Italy, year 4 Sweden; Teaching hours: 10

Description:

- Focus on one of the 21 Spanish – speaking countries. Study and learn about different cultural aspects such as living conditions, habits, religion, geography, politics and other societal and cultural features that give a good picture of the country.
- Search for information through written and spoken sources. Take notes and prepare an oral presentation, also including visual and audio aids (such as pictures and clips on spoken dialect, scenery, etc.).
- (Comment: if preferred, students could also focus on specific historical events, literary periods and writers from a Spanish speaking country).

Learning objectives

- Daily life and lifestyles in different contexts and areas where the language is used.
- Clearly spoken language and simple texts which are instructive, descriptive and communicative, also via different media and in combination with illustrations, eg. film.
- Different ways of searching for and selecting texts and spoken language from the internet and other media.
- Presentations, instructions, messages, and descriptions in coherent speech and writing.

Materials

- Written and spoken material from reliable sources from the Internet, newspapers, books etc.

MODULE 6: STUDIES AND THE WORKPLACE (ESTUDIOS Y TRABAJO).

Year 1 Spain, year 3/4 Italy, year 4 Sweden; Teaching hours: 10

Description:

- To learn about the academic world (current and future studies) and the workplace and study topic specific vocabulary.
- To acquire a better understanding for future work and studies in a Spanish speaking country and to make comparisons to the student's own country.
- Written communication where the student explains, discusses and compares the academic world and the workplace.
- Writing a curriculum vitae/ cv.

Learning objectives

- Presentations, instructions, messages and descriptions in coherent speech and writing.
- Speaking and writing for contact and communication.
- Different ways of searching for and and selecting texts and spoken language from the internet and other media.
- How words, fixed language expressions and everyday phrases are used in spoken language and in texts in different situations.
- Language correctness in terms of e.g. Pronunciation, intonation, words, polite phrases and other fixed language expressions.

Materials

- Textbooks in use, articles, books, the Internet.

MODULE 7: ABOUT PRESS AND NEWS

Year 1 Spain, year 3/4 Italy, year 4 Sweden; Teaching hours: 10

Description:

- To learn about the sections of the newspaper
- Vocabulary: The Journalistic language, Types of newspapers and magazines
- To acquire a better understanding of Journalism and publishing
- Vocabulary: Professions of journalism and publishing

Learning objectives
- Speaking and writing for contact and communication.
- Different ways of searching for and and selecting texts and spoken language from the internet and other media.
- Cultural knowledge about the organization of newspapers
- Cultural knowledge about graphic humour in Spain

Materials
- Textbooks in use, articles, books, the Internet

MODULE 8: "EN LINEA@", ABOUT THE INTERNET.

Year 1 Spain, year 3/4 Italy, year 4 Sweden; Teaching hours: 10

Description:
- Communication and vocabulary: Computing and the Internet
- Verbs related to the computer and the Internet –
- Social networks –
- Talking on the phone
- Culture and skills: Latin America online
- Talking and writing about the dangers of the Internet

Learning objectives
- Speaking and writing for contact and communication through the net.
- Different ways of searching for and and selecting texts and spoken language from the internet and other media.
- Cultural knowledge about the social networks
- Cultural knowledge about how Spain fights phishing and other dangers

Materials
- Textbooks in use, articles, books, the Internet

4. 7 HISTORY OF ART
NATIONAL CURRICULA

Swedish National Curriculum - Folkungaskolan

The subject of art and culture is its by nature interdisciplinary. It is grounded in aesthetics, the history of ideas, history, architecture, and in dance, film, art, music and the theatre. The subject covers cultural history in the sense of the history of art forms and the relationship between cultural history, contemporary ideas and societal change. The subject covers both contemporary And historical, national and international cultural trends with emphasis on developments in the West.

Aim of the subject. Teaching in the subject of art and culture should aim at helping students develop knowledge of the history of ideas, the development of the arts, as well as of contemporary cultural expression. It should also help students develop knowledge of what may be meant by culture and what the concept covers. Teaching should give students the opportunity to become familiar with the diversity and richness of artistic expression, and also increase their readiness to embrace what may seem new and strange. Students should be given the opportunity to develop a reflective and critical approach to art forms and the role of the arts in society. Teaching should also help students develop creativity and an interest in personal creativity. Analysing, interpreting and experiencing different kinds of cultural expression, also using different media, should be an essential part of the teaching. Teaching should blend theory with practice with an emphasis on both reflection and experience. It should also encourage students to experiment with different forms of expression and presentation using different media. Teaching should also provide scope for study visits and cultural experiences of different kinds. Teaching in the subject of art and culture should give students the opportunities to develop the following:

1. Knowledge of culture and the history of ideas from ancient times to today, as well as concepts from common epochs and genres.
2. The ability to put the development of culture and ideas into a broader context, and also to reason about how different events have influenced and influence the development of ideas and the arts.
3. Knowledge of the different meanings of the concept of culture and key ways of thinking in aesthetics.
4. Knowledge of the special means of expression used in different arts, and also their interaction with each other, with technological development and with the surrounding society.
5. Knowledge of what has characterised and characterises creative environments, and also about the conditions for creativity for different groups.
6. The ability to analyse and interpret cultural expressions and ideas by means of adequate concepts, methods and theories.

Main learning objectives and requirements for each of the three years
Core content

Teaching in the course should cover the following core content:

- Orientation to contemporary cultural expressions and points of contact between them.
- Different meanings of the concept of culture and the relationship between established art forms and popular culture.
- The relationship between social change and forms of artistic expression, in the present and from historical perspectives.
- Role and conditions of different forms of artistic expression in contemporary society.
- Issues relating to copyright, freedom of expression, democracy and censorship, as well as technological opportunities for presenting artistic work.
- The conditions of the arts practitioner, as well as concepts of creativity and the characteristics of creative environments.
- Students' own creative work and how it relates to contemporary artistic expression.
- Analysis and interpretation of current cultural and artistic phenomena. Concepts and theories occurring in current cultural debates.

Italian National Curriculum - Scuola Italiana Madrid

The subjects of Drawing and Art History must be framed within the same system of knowledge. Nevertheless, because of the differences between the two different approaches (one more practical and the other more theoretical), national curricula listed below are divided for the two different subjects.

2nd year – Secondary general Education – ISCED 3

Drawing (Technical drawing). Parallel projections: orthogonal and axonometric projections. Elements of shadow theory. Sections of solids. The representation of the main architectural elements. Elements of Computer Aided Design.

Art History. Paleochristian art and the art in catacombs. Constantinople and Byzantine art. Elements of barbarian art. Elements of Lombard art in Italy. The Romanesque, general characters, construction techniques and examples in central –

northern and southern Italy. Romanesque architecture in Europe. Medieval sculpture and paintings. The innovations of the Gothic, the international Gothic, historical vision of the Gothic in art criticism. Italian paintings in the thirteenth and fourteenth centuries.

3rd year - Secondary general Education - ISCED 3

Drawing (Technical drawing). Review of orthogonal and axonometric projections. Central and accidental perspective of solids and groups of solids. The theory of shadows projections: application in perspective. Freehand architectural drawing. Elements of Computer Aided Design.

Art History. Art in the Renaissance. The invention of perspective. The new social role of the artists: between mechanical and liberal arts. The artistic panorama in the 15th century in Italy. Flemish art. Art in the 16th century: the mature Renaissance Between the birth of Mannerism and the new paradigms in art in the Counter-Reformation period. The seventeenth century and the birth of the Baroque. Landscape painting in the 18th century.

4th year - Secondary general Education - ISCED 3

Drawing (Technical drawing). The use of the main techniques in graphic representation. Theory of shadows projections: applications in perspective. Elements of architectural design. Elements of Computer Aided Design - 2D and 3D modeling.

Art History. The European artistic panorama between Neoclassicism and Romanticism. The influence of photography on painting. From Impressionism to Post-Impressionism: towards the art of the twentieth century. Between the crisis of the twentieth century and the artistic revolution: the Manifests and the art of the historical movement in avant-garde. The transformation of architecture between the 1700s and 1900s: between Neoclassicism, Historicist Eclecticism, Architecture of Engineers, Art Nouveau and the Modern Movement The shift of artistic production from Europe to the USA: the art after Second World War.

Main learning objectives and requirements for each of the three years

As indicated above, despite the subjects of Drawing and Art History must be framed within the same system of knowledge, because of the differences between the two different approaches (one more practical and the other more theoretical), below the main objectives of the subjects have been divided into three different categories. These objectives must be understood as valid for the entire course of study (2th, 3th and 4th year - Secondary general Education - ISCED 3), according to increasingly complex levels.

Common learning objectives for Drawings and Art History subjects: Being able to interpret visual and optical phenomena. Being able to distinguish the main structural elements of visual languages. Knowing how to distinguish the different means in visual communication. Being able to execute schemes for the structural analysis of an artwork. Being able to recognize the main architectural elements. Acquiring a critical awareness of the existing connections with other subjects.

Specific learning objectives for Drawing subject: Knowing how to read the formal and volumetric characteristics of an object and being able to visualize it first mentally and then graphically. Being able to correctly use the main techniques of graphic representation. Being able to perform, in the context of descriptive geometry, drawings of simple and even complex solids according to different projection systems. Being able to project shadows of solid objects in different systems of projections.

Specific objectives for the discipline of Art History: Knowing the methods of analysis and understanding of artworks. Being able to frame an artwork chronologically and spatially. Being able to apply the main rules of visual perception when reading an artwork; Acquiring a specific technical language for reading an artwork; Acquiring a critical knowledge of the artistic and cultural heritage, through the study of the most representative periods, artists and artworks in different contexts: national, European and international. Acquiring a specific vocabulary relates to the artistic expressions in Art History. Being able to critically analyze, comment and appreciate an artwork by identifying its main characteristics: structure, materials and technical data, subjects and themes of the figuration, elements of the visual language, symbolic and allegoric meanings, message and purpose for which it was made. Being able to make connections between the artistic and the historical-cultural context of reference. Understanding the role that the artistic heritage has had in the development of the history of a specific culture as a testimony of its civilization.

Italian National Curriculum - Liceo Moro

Technical Drawing. Rules for the realization of technical drawings. Axonometry: theory and specific language. Elements of Perspective: observer and horizon.

History of Art. A rich historical profile of artists and works from the Gothic style to Romanticism. Gothic Art, the Renaissance in Italy and Europe (painting, sculpture and architecture), The Flemish painters. Baroque and Rococo Art, Neoclassicism and Romanticism. Industrialism and Realism in the 19th century.

Preservation and restoration of the artistic and landscape heritage.

Main learning objectives and requirements for each of the three years

Students are gradually trained to:

- Analyze and critically interpret the contents of various forms of communication.
- Acquire specific language in relation to forms of artistic expression.
- Use Information and Communication Technology to study, research and communicate.
- Acquire background knowledge of artistic culture and traditions through the study of the works, authors and movements.
- Reach awareness of the cultural meaning of Italian artistic, archeologic and architectural heritage.
- Develop an informed taste for all creative expressions, music, dance and theatre included.
- Acquire the methods of descriptive geometry to facilitate the comprehension of contents in geometry and mathematics.
- Acquire problem-solving strategies for technical representations of reality and interpretation of expressive forms.
- Identify relations among elements in space, draw comparisons, make informed hypotheses.
- Relate art works to their historical context.

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

By the comparison of the situation in the three countries, the main difference that the group has identified is in the approach to the study of the History of Art. For instance, while all the schools – especially the Italian and Spanish one– the study has a relevant theoretical approach, focused on the historical and chronological changes in Arts between different ages of the western cultures, in the Swedish school the approach is especially focused on the social aspects of the art, especially connected with the contemporary society. Moreover, the pedagogical approach in the Swedish school has a more relevant focus on the developing personal creativity of the students. In addition, talking about the years and the amount of hours in the studying the subject of History of Art, the group found differences from one of the schools to the others: in the Swedish school the program lasts approximately one and a half year for almost 3 hours a week; in the Spanish school the subject lasts 4 years, including 2 hours a week, the same weekly amount in the Liceo in Italy, but lasting between 3 and 5 years according to the specialization of the studies.

For these reasons the art group thought that a more affordable interchange program is considering only a 2/3 months scenario and for that we programmed 2 different modules, for instance A brief history of the portrait in art and The representation of food in art, as essential aspects of the culture in societies. In addition to these themes the group has considered to implement possibly The relationship between Art and politics/power.

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF POSSIBLE COMMON ELEMENTS.

For a 2/3 months perspective, the group identified the following common learning objectives:

- Acquiring basic language and vocabulary in relation to the main forms of artistic expressions or the vocabulary needed for the short term content/topic.
- Developing a basic ability to read and analyse a work of art.
- Using digital and interpersonal competences to conduct a group work and presentation on a specific topic based on the material the teacher presented (artist, a work of art, artistic movement, ecc.).
- Understanding and awareness of the importance of the cultural and artistic heritage of a nation, developing an active citizenship competence.

For a full school year:

- Acquiring specific language and complete vocabulary in relation to different forms of artistic expressions.
- Developing a more specific and thorough ability to critically read and analyse a work of art, comparing it to other authors.
- Being able to relate the main art works to their historical, cultural and social context
- Using digital and interpersonal competences to conduct an original study, research, group work and presentation on a specific topic (artist, a work of art, artistic movement, ecc.).
- Understanding and awareness of the importance of the cultural and artistic heritage of a nation, developing an active citizenship competence.

PROPOSED TOPICS/CONTENTS.

MODULE 1: A BRIEF HISTORY OF THE PORTRAIT

Teaching hours: 20-24 hours including practical activities

Description:

Portrait has always been a central genre in art history, not only because it represents an important historical source, but even because it is intimately connected with a specific cultural and space-time context. An emblematic example, in this regard, is its relationship with the patronage as well as with the representation of the power.

Learning objectives

Understanding the evolution of the portraits across the centuries, from the least Ancient Egypt to contemporary society, by the analysis of different forms of representation, from realism to idealization, from stylization to expressionistic deformation. Being aware of the influence of photography on portraiture. Understanding the relationships between portraits and power across the centuries. A critical analysis of the self portrait across the centuries in western society and its relationships with selfies in contemporary society, as a central phenomenon in representation of self in social networks.

Materials

Written and spoken materials, textbook, articles, videos, PowerPoints or images shown during the class.

As an example of video: 500 years of female portraits in western art by Philip Scott Johnson, visages d'art (portraits in different cultures).

MODULE 2: THE REPRESENTATION OF FOOD IN ART

Teaching hours: 20-24 hours including practical activities

Description:

Food has always been an essential part in the life of mankind as well as in the culture of different societies. It tells a lot about the habits of a population and its people, reflecting the technical development, the trading and foremost the cultural exchanges with other realities. Food and nutrition is still a central theme in today's world in order to fight poverty and picture new and sustainable development models.

Learning objectives

The first part will be focused on the analysis of the representation of food in the ancient western civilizations: from the experience of the ancient Greek symposium to the representation of food in Roman culture. The second part will be divided into the sections: the first one will analyze the symbols of different kinds of food in Christian tradition and in sacred stories; the second deals with how food is presented in genre painting and still life, from late XVI century Flanders to the naturalism between XVII and XIX century. A fourth part will discuss the most meaningful examples of food in contemporary art and how it reflected and still reflects habits changing in our world (XX century).

Materials

Written and spoken materials, textbook, articles, videos, PowerPoints or images shown during the class.

4. 8 PHYSICAL EDUCATION
NATIONAL CURRICULA

Swedish National Curriculum - Folkungaskolan

Sports, outdoor life and different forms of exercise and recreation are of great importance for both individual and public health. The subject of physical education and health nurtures a cultural heritage of physical activities and outdoor experiences. It provides opportunities to experience and understand the importance of physical activities and their relationship with well-being and health. Skills in and knowledge of physical activities and how various lifestyle factors impact human health is fundamental in enabling people to be able to take responsibility for their health.

Aim of the subject. Teaching in the subject of physical education and health should aim at helping students develop their physical ability, and the ability to plan, carry out and assess a variety of physical activities that promote all-round physical capacity. In addition, teaching should help students develop their interest in and ability to use different physical activities, outdoor environments and nature as a source of well-being. Teaching should lead to students developing knowledge of how their own bodies function at work, and the importance of lifestyle and of the consequences of physical activity and inactivity. Through teaching, students should be given the opportunity to develop knowledge of managing safety and emergency procedures for physical activities. Teaching should also help students develop their health and environmental awareness, and an interest in working with health issues in working life and society. Teaching should consist of physical activities designed in such a way that everyone can participate and develop based on their individual circumstances. It should help students develop their ability to adapt physical activities based on their needs, aims and goals. Teaching should relate experiences of physical activities to facts and theories. Teaching should raise awareness and challenge stereotypes of what is considered to be masculine and feminine, and inform about the consequences of different body ideals. It should also address other issues of ethics and morality related to participation in sport.

Teaching in the subject of physical education and health should give students the opportunities to develop the following:

1. The ability to plan and carry out physical activities which consolidate and further develop physical ability and health.
2. The ability to carry out and adapt time spent outdoors to different conditions and environments.
3. Knowledge of the importance of physical activities and experiences from nature for physical ability and health.
4. The ability to handle safety and emergency situations related to physical activities.
5. Knowledge of cultural and social aspects of physical activities and experiences from nature.
6. The ability to take an ethical stand on issues of gender patterns, gender equality and identity in relation to the performance of exercise and sport.
7. Knowledge of the demands different situations place on the ergonomic adaptation of movement. The ability to ergonomically adapt their movements to different situations, and to assess how environments can be ergonomically adapted to people.

Courses in the subject
- Physical education and health 1, 100 credits, which builds on knowledge from the compulsory school or equivalent.
- Physical education and health 2, 100 credits, which builds on the course physical education and health 1.
- Physical education and health 1 – specialisation, 100 credits.
- Physical education and health 2 – specialisation, 100 credits, which builds on knowledge from the course physical education and health 1 – specialisation.
- Physical Education and Health 2 Specialisation, 100 credit

Main learning objectives and requirements for each of the three years

Core content. Teaching in the course should cover the following core content:
- The importance of physical activity and lifestyle for physical ability and health.
- Exercise, sports and outdoor activities which develop all round physical ability.
- Training methods and their effects, such as training fitness and coordination.
- Movement to music and dance.
- Outdoor environments and nature as arenas for physical activity and recreation.
- Methods and equipment for outdoor activities.
- Safety in connection with physical activity and outdoor activities.
- Methods in the event of injuries and emergencies, such as emergency procedures for bleeding and near drowning incidents.
- Impact of diet, drugs and doping substances on health and performance.
- Stress management and mental training.
- Work and study environments: interaction between the demands of different situations and people with regard to ergonomic aspects, such as physical balance and lifting techniques.

Italian National Curriculum - Scuola Italiana Madrid

At the end of the high school course the student has acquired the awareness of his own corporeality understood as knowledge, mastery and respect for his own body; he has consolidated the social values of sport and has acquired a good motor preparation; has developed a positive attitude towards a healthy and active lifestyle; has grasped the implications and benefits deriving from the practice of various physical activities carried out in different environments. The student achieves mastery of his own body by experimenting with a wide range of motor and sports activities: this promotes balanced physical and neuromotor development. The stimulation of the student's motor skills, both coordinative and of strength, endurance, speed and flexibility, is both a specific objective and a prerequisite for the achievement of higher levels of motor skills and performance. The student knows how to act responsibly, thinking about what he is doing, recognizing the causes of his mistakes and developing adequate correction procedures. He is able to analyze his own and others' performance, identifying positive and negative aspects. The student will be aware that the body communicates through a specific language and knows how to master and interpret the messages, voluntary and involuntary, that it transmits. This awareness favors the free expression of moods and emotions through non-verbal language. The knowledge and practice of various individual and team sports activities allow the student to discover and enhance personal attitudes, abilities and preferences by first acquiring and mastering motor skills and then specific sports techniques, to be used in an appropriate and controlled way. Sporting activity, experimented in the different roles of player, referee, judge or organizer, enhances the student's personality by generating specific interests and motivations, useful for discovering and guiding the personal attitudes that each can develop. Sports activity is carried out in harmony with the educational requirement, which is always a priority, in order to promote the habit and appreciation of its practice in all students. It may be preparatory to any planned activity within the School Sports Centers.The knowledge and awareness of the benefits induced by physical activity practiced on a regular basis give the student a positive attitude towards an active lifestyle. Successful experiences in different types of activities foster greater self-confidence in the student. An adequate base of knowledge of methods, working techniques and lived experiences makes the student aware and able to independently organize their own physical development / maintenance plan and to keep their posture under control. The student matures the need to reach and maintain an adequate level of psychophysical form in order to be able to appropriately address the daily needs with respect to study and work, sport and leisure. The acquisition of a conscious and correct relationship with the different types of environment cannot be separated from the learning and effective respect of the fundamental principles of prevention of situations at risk (anticipation of danger) or of a prompt reaction to the unexpected, both at home, at school or outdoors. Students will also enjoy multiple opportunities to familiarize themselves with and experiment with the use of innovative technologies and tools, applicable to the activities carried out and to other disciplines.

Main learning objectives and requirements for each of the three years

First year. After verifying the level of learning achieved during the first cycle of education, an educational path will be structured to fill any gaps in the basic training, but also aimed at enhancing the potential of each student. Self-perception and comprehension of functional development of skills motor and expressive: The student will have to know his own body and its functionality, expand the skills coordinative and conditional by creating complex motor schemes useful for dealing with activities sports, understand and consciously produce non-verbal messages by reading critically and decoding their own bodily messages and those of others. Sport, rules and fair play:The practice of individual and team sports, even when it takes on the character of competitiveness, must be achieved by privileging the educational component, in order to promote all students are accustomed to physical activity and sports. It is essential to experience the different roles and related responsibilities in sport, either in arbitration and in jury duties. The student will practice team sports by applying effective strategies for solving problematic situations; will engage in individual sports getting used to confrontation and assumption of personal responsibility; he will collaborate with his comrades within the group bringing out their potential.

Second year. The action of consolidation and development of knowledge and skills of students will continue in order to improve their motor and sports training. At this age the students, also favored by the complete maturation of the cognitive areas frontal, will acquire an ever wider ability to work with a critical and creative sense, with the awareness of being actors of every bodily experience lived. Self-perception and completion of functional development of skills motor and expressive: greater self-mastery and the expansion of coordination, conditional and expressive will allow students to perform complex movements and to know and apply some training methods such as to be able to deal with motor and sports activities of high level, also supported by cultural and technical-tactical insights. The students will be able to evaluate their skills and performance by comparing them with the appropriate ones reference tables and carry out activities of different duration and intensity, distinguishing the variations physiological induced by motor and sports practice. They will experiment with various expressive and communicative techniques in individual and group works, which may arouse self-reflection and an analysis of the lived experience. Sport, rules and fair play: the increased level of performance will allow students to be more involved in sports, as well as the participation and organization of school competitions in different sports specialties or expressive activities.

The student will cooperate in a team, using and enhancing with the teacher's guidance individual propensities and aptitude for defined roles; will be able to observe and interpret phenomena related to the world of sports and physical activity; will practice sports deepening the theory, the technique and tactics.

Third year. The student's personality can be fully enhanced through the further diversification of activities, useful for discovering and orienting personal attitudes with a view to full development of the potential of each individual. In this way the physical sciences will be able to do acquire the student multiple skills, transferable to any other life context. This it will lead to the acquisition of correct behavioral styles that have their roots in the activities motor skills developed over the five-year period in synergy with health education, to affectivity, the environment and legality.Self-perception and completion of functional development of skills motor and expressive.The student will be able to develop a complex motor activity, suitable for one complete personal maturation.

COMPARATIVE ANALYSIS OF CURRICULA AND IDENTIFICATION OF COMMON ELEMENTS.

Spain, Scuola Statale Italiana Di Madrid

At the end of the high school course the student has acquired the awareness of his own corporeality understood as knowledge, mastery and respect for his own body; he has consolidated the social values of sport and has acquired a good motor preparation; has developed a positive attitude towards a healthy and active lifestyle; has grasped the implications and benefits deriving from the practice of various physical activities carried out in different environments. The student knows how to act responsibly, thinking about what he is doing, recognizing the causes of his mistakes and developing adequate correction procedures. They are able to analyze his own and others' performance, identifying positive and negative aspects. The knowledge and awareness of the benefits induced by physical activity practiced on a regular basis give the student a positive attitude towards an active lifestyle. Successful experiences in different types of activities foster greater self-confidence in the student. An adequate base of knowledge of methods, working techniques and lived experiences makes the student aware and able to independently organize their own physical development / maintenance plan and to keep their posture under control. The student matures the need to reach and maintain an adequate level of psychophysical form in order to be able to appropriately address the daily needs with respect to study and work, sport and leisure. Self-perception and completion of functional development of skills motor and expressive: Greater self-mastery and the expansion of coordination, conditional and expressive will allow students to perform complex movements and to know and apply some training methods such as to be able to deal with motor and sports activities of high level, also supported by cultural and technical-tactical insights. The student will be able to evaluate their skills and performance by comparing them with the appropriate ones reference tables and carry out activities of different duration and intensity, distinguishing the variations physiological induced by motor and sports practice.

Sweden, Folkungaskolan Linköping

Teaching in the subject of physical education and health should aim at helping students develop their physical ability, and the ability to plan, carry out and assess a variety of physical activities that promote all-round physical capacity. In addition, teaching should help students develop their interest in and ability to use different physical activities, outdoor environments and nature as a source of well-being. Teaching should lead to students developing knowledge of how their own bodies function at work, and the importance of lifestyle and of the consequences of physical activity and inactivity. Teaching should consist of physical activities designed in such a way that everyone can participate and develop based on their individual circumstances. It should help students develop their ability to adapt physical activities based on their needs, aims and goals. Teaching should relate experiences of physical activities to facts and theories. Teaching in the subject of physical education and health should give students the opportunities to develop the following: the ability to plan and carry out physical activities which consolidate and further develop physical ability and health; the knowledge of the importance of physical activities and experiences from nature for physical ability and health.

COMPARATIVE ANALYSIS OF LEARNING OBJECTIVES AND IDENTIFICATION OF POSSIBLE COMMON ELEMENTS.

Sports in natural and outdoor environments

Scuola Statale Italiana Di Madrid

Goal: Orient yourself using a compass; Apply apps while carrying out physical activity developing motor skills

Enhance team spirit and mutual trust

Central content: Contact with nature, strengthening conditional skills, technology, civics.

Folkungaskolan

Goal: Ability to implement and adapt outdoor activities based on different conditions and environments; Knowledge of the importance of physical activities and nature experiences for physical ability and health.

Central content: Outdoor environments and nature as an arena for movement activities and recreation. Methods and tools for outdoor life.

Health, well-being and lifestyle

Scuola Statale Italiana Di Madrid

Goal: Ability to plan and carry out activities to develop physical ability and health awareness; Understand how to use metabolic parameters tools and apps and analyze the results; Learn about substances that can create addictions, doping and health issues.

Central content: The importance of physical activity and healthy lifestyle. Tools for measuring metabolic parameters, prevention, drugs, doping .

Folkungaskolan

Goal: Knowledge of the importance of physical activities and nature experiences for physical ability and health.

Central content: The importance of physical activity and lifestyle for physical ability and health.

Safety and prevention

Scuola Statale Italiana Di Madrid

Goal: Learn about first aid and sports injuries

Folkungaskolan

Goal: Ability to handle safety and emergencies.

Central content: Measures in case of injuries and emergencies, such as life-saving activities in the event of bleeding and drowning incidents.

Training methods such as cardio-, strength- and mobility training that develop students' physical abilities and self-awareness

Scuola Statale Italiana Di Madrid

Goal: Learn methodology and general principles of training; Learn how to plan training, also using apps; Awareness of best; practices for carrying out the exercises; Evaluate skills and performance; Improve basic physical skills.

Central content: Training methods, workouts, ergonomic aspects. technology, physiological enhancement, expressive and aesthetic sensitivity, sense of rhythm, socialization.

Folkungaskolan

Goal: Ability to plan and carry out physical activities that consolidate and further develop physical ability and health; Ability to ergonomically adapt their movements to different situations

Central content: Exercise, sports and outdoor activities that develop a versatile physical ability; Training methods and their effects; Movement to music and dance.

PROPOSED TOPICS/CONTENTS.

MODULE 1: TRAINING METHODS SUCH AS CARDIO, STRENGTH AND MOBILITY TRAINING.

Year 1 Sweden, year 1- 2-3-4 Spain. Teaching hours: Sweden 40 hours, Spain 18 hours

Description:

The students carry out various activity that aim to increase their VO2 max, strength and mobility:

running, dance, sport, crossfit, tabata and stretching. The students must perform strength and mobility tests.

During the lesson we talk about what health effect they can get from exercise and the theories of training methods. When they have completed their training, the student performs resistance, strength and mobility tests and get to reflect on their training, the effect on their physical ability and their health.

The students will reflect on what they need to train and how they should train. They are given the task of planning training which they then carry out and evaluate.

Learning objectives

- Ability to plan and carry out physical activities that consolidate and further develop physical ability and health.
- Ability to ergonomically adapt their movements to different situations.
- Evaluate skills and performance.

Materials

Stereo, Stopwatches, agility ladder, cones, medicine ball, bosu, trx, hoops, balloons, elastic bands, backrest, ropes, mats.

MODULE 2: SPORTS IN NATURAL AND OUTDOOR ENVIRONMENTS.

Year 1 Sweden, year 1- 2-3-4 Spain. Teaching hours: Sweden the activity lasts during a school day for about 7 hours, preparation 2 hours and follow-up 1 hour total 10 hours, Spain develop this module in 20-25 hours, interaction with Science and other subjects.

Description:

The students are divided into smaller groups where each group gets a map and a compass. The group performs a hike with the help of the map and the compass. During the hike, the students perform various tasks aimed at improving team spirit and mutual trust. Once they have reached the place that is marked on the map, the students are given new tasks to perform. For example, build windbreaks and prepare their lunch as well as eat lunch outdoors. At the end of the day, students will discuss what they have learned and how health is affected by outdoor activities in the natural environment.

Given the difference in the total number of hours existing in the two educational systems and thanks to the favourable climatic conditions, the Italian school could develop this module through the following activities:

- Outdoor training circuits using what we find around the park: climbs, stairways, stairs and trees.
- Urban trekking with GPS and a smartphone app that creates a video with the training
- Plogging
- Trekking in the nearby mountains with the possibility of climbing.
- Riding mountain bike in nature (only at the weekend)

Learning objectives

- Ability to implement and adapt outdoor activities based on different conditions and environments.
- Knowledge of the importance of physical activities and nature experiences for physical ability and health.
- Orient yourself using a compass
- Apply apps while carrying out physical activity developing motor skills
- Enhance team spirit and mutual trust

Materials

Compass, maps, stopwatches, smart phone, stereo amplifier, relevant websites, PowerPoint presentations, videos and interviews, textbook in use, articles on the current climate situation, articles on magazines (Sport week/National Geographic...), tarpaulins, rope.

MODULE 3: SAFETY AND PREVENTION.

Year 1 Sweden, year 1 Spain Teaching hours: Sweden 3 hours, Spain 2 hours

Description:

Describe the mains measure in case of injuries and emergencies such as life-saving activities:

Cardio-respiratory arrest and cardiopulmonary resuscitation, Heimlich maneuvering, asthma and epileptic crisis, loss of consciousness, vomiting, diarrhea, abdominal pain, nosebleed, hits to the head, teeth, extremities.

Learning objectives

- Recognize a situation of urgency and gravity
- Implement the appropriate procedures in relation to the situation identified
- Ability to handle safety and emergencies.

Materials

PowerPoint presentations, simulation, demonstrative teaching kit, textbook in use.

MODULE 4: HEALTH, WELL-BEING AND LIFESTYLE.

Year 1 Sweden, year 1- 2-3-4 Spain. Teaching hours: Sweden 10 hours, Spain 3 hours

Description:

The teacher presents facts and theories about health and lifestyle. Students conduct a lifestyle analysis and reflect on their lifestyle and whether they want to implement changes. Students have group discussions about health and lifestyle. The students create a health plan where they set goals about what they want to improve with their health and lifestyle. They should also make a plan for how they can improve this. Then they should try to follow the plan and finally evaluate if the health has improved.

Learning objectives

- Ability to plan and carry out activities to develop physical ability and health awareness.
- Understand how to use metabolic parameters tools and apps and analyze the results.
- Learn about substances that can create addictions, doping and health issues.
- Knowledge of the importance of physical activities and nature experiences for physical ability and health.

Materials

Powerpoint presentations, textbook in use, web-based lifestyle analysis

ANNEX 1

Comparative analysis of curricula

The thematic group should conduct a comparative analysis of curricula in order to develop a joint study programmes. The comparative analysis should result in a document divided in three sections.

Section 1
Comparative analysis of curricula and identification of common elements

Section 2
Comparative analysis of learning objectives and identification of possible common elements.

Section 3
The groups should identify and choose a set common topics/on the basis of the learning objectives identified in the previous section.

ANNEX 2
Development of teaching modules

TITLE OF THE MODULE:_____
YEAR:_____
TEACHING HOURS:_____

DESCRIPTION

LEARNING OBJECTIVES

MATERIALS

ANNEX 2
Development of teaching modules

GUIDELINES
HOW TO JOIN/DEVELOP THE STUDY PLAN

Is your school interested in joining or developing the Study Plan ?
the first step is to appoint a COORDINATOR to liaise with the partner schools and manage the work.
The process should begin with the appointment of a COORDINATOR to liaise with the partner school(s) and organise the work inside the school.
The school should take the following steps:

1. FAMILIARISE WITH THE STUDYPLAN

The first steps consists on reading the document "the STUDY PLAN" and starting with the identification of the potential working group among the teachers of your school.

2. ORGANISE AN INTERNAL MEETING

Organise an internal meeting to present and share the document The Study Plan Model with the colleagues you interested and that could be involved.

3. IDENTIFY THE SUBJECTS

Along with your colleagues identify all the subjects that might be included in the Study Plan and create the working group with the teachers.

4. COLLECT THE CURRICULA

For each subject identified, collect the national curriculum and the learning objectives. You will share these documents with the partner school.

5. DESCRIBE YOUR SCHOOL

Prepare a description of your school to share with the partner school. Highlight the general context of your school (Type of school, educational profile, number of pupils and staff, profile of students, location)

6

DESCRIBE THE EDUCATION SYSTEM

Prepare a description of your national education system explaining how it is organised and how it work. The key features can be found on the Eurydice website (www.eurydice.eacea.ec.europa.eu).

7

ORGANISE A MEETING

You are now ready to meet the partner school. Organise a first meeting with the partner school to get to know each other and kick-off the joint work. The meeting will be an opportunity to exchange the school and education system description and to decide together which subjects can be included in the Study Plan.

8

GROUP WORK

It is time to start developing the common curriculum. Organise a second meeting with the partner school, where teachers, divided by subject, should conduct a comparative analysis of national curricula to identify common elements, learning objectives, topics and skills to be acquired.

SEE THE ANNEX 1

9

FEEDBACK

Collect feedback and any problems encountered in the process from participating teachers.

10

MEETING

Organise a third meeting with the partner school. This is the time for teachers to develop teaching modules for each subject to be taught during the mobility .

SEE THE ANNEX 2

DEEDS

www.deedsproject.eu