



NATIONAL CURRICULUM FRAMEWORK

FOR PRE-SCHOOL EDUCATION AND GENERAL COMPULSORY AND SECONDARY EDUCATION



Republic of Croatia
Ministry of Science, Education and Sports

NATIONAL CURRICULUM FRAMEWORK

FOR PRE-SCHOOL EDUCATION AND GENERAL COMPULSORY AND
SECONDARY EDUCATION

Zagreb, July 2010

Foreword

Dear educators, class and subject teachers, primary and secondary school teachers, associates, principals, children, primary and secondary school students, parents and legal guardians, citizens;

Knowledge, competences, success and competitiveness are strategic goals of the Republic of Croatia. The changed and changing world of the market economy, European coexistence, intercultural relations, as well as advancements in information technology and science, and globalisation processes, require ever better adaptability of the individual and society. These goals may be attained through systemic and long-term changes in the education system. Changes at the higher-education level have been carried out since the introduction of the Bologna process. Changes at lower levels of education are yet to be implemented. The starting point for systemic changes at the level of pre-school education, primary and secondary education is the National Curriculum Framework for pre-school education, general compulsory and secondary education (the NCF).

The values stipulated in the NCF involve clear objectives whose fulfilment will require the commitment of all stakeholders – those that perform educational work in educational institutions and those that indirectly participate in the noble mission of education. The values, goals and interdisciplinary themes contained in the NCF focus both on guidance and education. The general education and key competences are intended to equip each and every student with necessary skills and prepare them for a changing and unpredictable world that requires lifelong learning. Educational areas and cycles create stronger links within educational contents and provide a more flexible way of programming and planning student-oriented educational work.

The NCF lays down a framework for the acquisition of key and professional competences. It primarily serves as the basis for the restructuring of syllabi, as well as subject curricula at the level of primary and secondary education, taking into consideration the optimum student workload at school and at home. The NCF is the foundation for the definition of expected student achievements in all subjects. Furthermore, it facilitates organisation of subject structure – the core educational contents, optional and non-compulsory subjects. The NCF is the basis for systematic application of interdisciplinary themes, and is binding upon all implementers of the educational and teaching work.

The NCF requires transparency of educational institutions and closer cooperation between educational institutions and parents/legal guardians, the local community, and a wider community.

The NCF presumes a high level of competence of teachers and their ability to effectively utilize a range of methods and teaching aids and successfully organise education and teaching.

The document relies on and takes into consideration the history and tradition of the Croatian education system, as well as the legal regulations and documents adopted by the Government of the Republic of Croatia, and analyses of relevant European documents. Gratitude for the development and preparation of this valuable and important document is owed to many – members of the three Councils for the National Curriculum, educators, class teachers, subject teachers, pedagogues, psychologists, librarians, special education teachers, university professors and other members of academia. Our thanks go to numerous institutions – ministries, institutions of the ombudsman, the Croatian Academy of Science and Arts, all higher educational institutions and their constituent parts (faculties, departments, academies), agencies, trade unions, schools, the Croatian Employers' Association, the Croatian Chamber of Economy, the Croatian Chamber of Arts and Crafts. Numerous county professional councils, education centres, professional associations and societies, political parties and individuals contributed to the completion of this document.

The NCF sets the desired course for the upbringing and education of our children, students and youth, on their path to knowledge, competence, success and competitiveness. Those expectations will be met through a responsible, conscientious, and consistent implementation of this document.

Radovan Fuchs Ph.D.

Minister of Science, Education and Sports



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INTRODUCTION

The goal of developing a knowledge-based society and continuing globalisation have highlighted the role of education in personal and social development. The Republic of Croatia has recognised the need to transform the school system in order for it to meet the demands of modern times, with the changes in the national curriculum being an important element of these changes.

The preparation of the *National Curriculum Framework* was set as one of the priorities of the Croatian education policy, since this document enables harmonisation and integration of all elements of the system. The *National Curriculum Framework* is a fundamental document that determines all the essential elements of the education system, from the pre-school level to the completion of the secondary education.

The preparation of the *National Curriculum Framework* was preceded by a number of activities envisaged within the Croatian education policy and aimed at the improvement of the quality of education. In 2005 the Government of the Republic of Croatia adopted the *Education Sector Development Plan 2005 – 2010*. This is a strategic development document based on a comprehensive consideration of the education system. In 2005 the Ministry of Science, Education and Sports started implementing a school reform project known as the *Croatian National Education Standard* (CNES), which marked the commencement of the qualitative changes in primary school programme contents. The year 2007 saw the preparation of the *Strategy for the Preparation and Development of the National Curriculum for Pre-School Education, General Compulsory and Secondary Education*. Those and many other activities created important prerequisites for the devising and implementation of more considerable interventions into the education system at the national level, including the drafting of the *National Curriculum Framework*.

The basic characteristic of the *National Curriculum Framework* is a transition to a system based on competence and student achievement (learning outcomes), unlike the previous (i.e., current) one, which focuses on content. Applying the *National Curriculum Framework* results in the harmonisation of all levels of education that precede the higher-education level (which has changed its system by introducing the Bologna process).

The transition to a competence-based system would be deficient without acknowledging the social and cultural values as well as the history and tradition of the Croatian education system, and the core guidelines of the Republic of Croatia.

The *National Curriculum Framework* defines core educational values, educational goals, principles and goals of educational areas, principles of evaluation of student achievements, and principles of evaluation and self-evaluation of the implementation of the national curriculum. It provides for short descriptions of interdisciplinary themes and their goals. Expected student achievements for educational areas according to cycles have been determined. The subject structure of each of the educational areas has been outlined. Namely, a successful implementation of education that leads to the acquisition of competences is not in contravention of traditional subject-based teaching. The *National Curriculum Framework* instructs teachers to overcome subject specialisation, and to take part more or less equally in developing students' core competences by applying the principle of shared responsibility - in particular by making explicit the values that are intertwined with cross-subject (cross-curricular) topics.

The *National Curriculum Framework* constitutes the baseline for the preparation of syllabi, i.e., defining optimal workloads for students, and building on educational area achievements to prepare subject-based curricula. The prerequisite for high-quality implementation of the national curriculum is a high level of competence among the implementers of education policy. It requires the preparation of systematic training programmes to enable teachers, associates and principals to apply the curriculum-based approach. The *National Curriculum Framework* will also be used for the preparation of textbooks and other teaching and educational resources.

It is important to point out that the *National Curriculum Framework* is an exceptionally significant document for planning and organising school operations, including the preparation of the school curriculum. The described educational values, goals, competences and principles contribute to the understanding and concerted planning of the development and operation of schools. Further, a description of educational areas and their goals helps schools to inter-connect subjects and streamline instruction purposefully. This is also facilitated by cross-curricular topics whose introduction serves to deepen topical content and boost students' knowledge and awareness about health; rights; personal and social accountability; social, cultural, economic, technological, and sustainable development; and

the values of learning, working, self-esteem, and respect for other and different people. The introduction of cross-curricular topics – and the possibility of devising and organising optional and non-compulsory instruction – will enable schools to enrich the school curriculum significantly.

This document calls on us to start thinking out of the box when it comes to education: it addresses challenges to learning and teaching, to instruction planning and implementation, and to school work in its entirety.

The preparation of curriculum documents, including the *National Curriculum Framework*, constitutes a complex and time-consuming process that implies a permanent evaluation and self-evaluation of the course of education for those who learn and those who teach, and a constant connection between education policy and science and education practice.



I. NATIONAL CURRICULUM FRAMEWORK FOR PRE-SCHOOL EDUCATION AND GENERAL COMPULSORY AND SECONDARY EDUCATION

1. What is the *National Curriculum Framework*?

The *National Curriculum Framework* constitutes the basic elements of pre-school, general compulsory and secondary education, including education for children with special needs. The *National Curriculum Framework* is the fundamental document that presents the elements of the curriculum system: the values, goals, principles, content and general goals of educational areas, the evaluation of student achievements, and the evaluation and self-evaluation of the realisation of the national curriculum.

The centrepieces of the *National Curriculum Framework* are student achievement in educational areas, organised according to education cycles, and descriptions and goals of interdisciplinary themes that focus on developing key student competences. It is the basis for the elaboration of educational area subject structure, determining the subjects and modules of the core curriculum, optional subjects and modules, student workload, etc. In other words, the *National Curriculum Framework* is the basis for the preparation of syllabi (i.e., subject curricula) and other curriculum documents (e.g., guidelines for the application of the curriculum, teacher manuals, parent manuals, standards for the preparation of textbooks and other teaching materials, standards and benchmarks for the evaluation of the quality of student achievements and school operations, etc.).

It should be noted that the *National Curriculum Framework* facilitates the planning and organisation of school operations, including the adoption of the school curriculum. Educational values, goals, competences and principles determined by the document enable understanding of the basic course of development of the national curriculum, and constitute key determinants for the harmonisation of the planning of the development and operation of education institutions.

The descriptions, goals and expectations of student achievement in educational areas as well as the descriptions and goals of cross-curricular topics help the schools connect subjects more easily, streamline teaching, and enrich education with optional and non-compulsory subjects and extracurricular activities in line with schools' profiles and priorities, the needs of the students, and the needs of the local community.

The *National Curriculum Framework* is a development document insofar as it will lead to the development, planning, or elaboration of all other documents, and insofar as it will be open to changes and continual renewal in accordance with changes and developments in society and education. Rapid changes in science, technology, the economy, and other areas of social life put before education ever-new requirements, and this leads to the need for constant evaluation and adjustment of the national curriculum. A modern approach to the preparation and development of the national curriculum increasingly decentralises and democratises this process, and involves and broadens responsibility for any changes to include educators, primary and secondary school teachers, associates, principals, and other important stakeholders and users of education – parents, children, students, and members of the local and regional community, social partners, and others.

2. Focus on Competences

The development of a knowledge-based society and the globalization process, and particularly the growth of the world market and competition at the global level, create new social and individual needs in all areas: culture, scientific and technological development, the economy, social cohesion, the position and role of the individual as citizen, and his/her personal development.

Life and work in the contemporary society of rapid changes and tough competition require new knowledge, skills, abilities, values, and attitudes, i.e. new competences of the individual, which emphasize innovativeness, creativity, problem solving skills, critical thinking skills, entrepreneurship, information literacy, social skills, and other skills. It is not possible to foster these skills in a traditional education system whose main function is knowledge transfer. A shift in curriculum policy and planning from a focus on knowledge transfer to one of competence development means a turnabout in the approach to education programming.

The development of national curricula that focus on student competences represents one of the main avenues of curriculum policy in European and other countries. To respond successfully to the challenges of the development of the knowledge-based society and the world market, the European Union has adopted eight key competences for lifelong learning. The education policy of the Republic of Croatia has adopted the same key competences. They are as follows:

- **communication in the mother tongue** – this is the ability to express oneself correctly and creatively, in both verbal and written form; to interpret concepts, thoughts, feelings, attitudes and facts; and to interact linguistically in a full range of societal and cultural contexts: in education and training, work, leisure and everyday life. It also includes the development of the awareness of the impact of languages on others, and the importance of using language in a positive and socially responsible way.
- **communication in foreign languages** – this is the ability to use a foreign language to understand and express oneself, in both verbal and written form, and to interpret concepts, thoughts, feelings, attitudes and facts in a full range of societal and cultural contexts. A significant part of achieving this ability is developing skills of intercultural understanding.
- **mathematical competence and basic competences in science and technology** – mathematical competence is the ability of the student to develop mathematical thinking skills and apply them to problem solving in various everyday situations; science competence is the ability to use the body of knowledge and methodology that explains the natural world in order to identify questions and draw evidence-based conclusions; competence in technology is the application of scientific knowledge and methodology to satisfy perceived human wants or needs. Basic abilities in science and technology also involve an understanding of the impacts caused by human activity and the responsibilities of individual citizens.
- **digital competence** – this involves the confident and critical use of Information Society Technology for work, leisure, social life, and communication. It is underpinned by basic skills and abilities in ICT: the use of computers to retrieve, assess, store, produce, present, and exchange information, and the development of collaborative networks via the Internet.
- **learning to learn** – this includes the ability to pursue knowledge, persist in learning, and organise one's own learning, including through the effective management of time and information, both individually and in groups.
- **social and civic competences** – these involve abilities in the areas of inter-personal and intercultural cooperation.
- **sense of initiative taking and entrepreneurship** – this refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects to achieve objectives. This supports individuals in their everyday lives, both professionally and socially. It is also a foundation for acquiring specific knowledge and skills needed by those spearheading social or commercial activity.
- **cultural awareness and expression** – this relates to a student's awareness of the importance of creatively expressing ideas, experiences and emotions through a range of performing arts and media, including music, dancing, theatre, literary, and visual arts. It also includes knowledge and awareness of local, national and European cultural heritage, and of the place of such cultural heritage in the world. In this process it is essential that students are trained to understand and defend cultural and linguistic diversity in Europe and the world, and to be aware of the importance of aesthetical factors in everyday life.

According to: Recommendation of the European Parliament and of the Council of 18 December for lifelong learning (2006/962/EC)

At present, the above abilities are being introduced into the national curricula of the member states of the European Union; their development is one of the most important goals of European education policy and of national education policies in European countries. Accession to the European Union is one of the key strategic goals of the Republic of Croatia. Therefore, in addition to its own educational traditions and needs, an important factor for Croatia in the creation of education policy and the development of a national curriculum is also the body of European education documents, in particular the European Competence Framework, which provides for the definitions of the key competences listed above.

3. What are the elements of the *National Curriculum Framework*?

The basic elements of the *National Curriculum Framework* are as follows:

- socio-cultural and educational values
- goals that demonstrate expectations of achievement throughout each student's education by defining what knowledge each and every student must acquire, and which skills, abilities and attitudes he or she must develop
- principles as the guidelines of educational activity
- methods, means, and forms of work
- educational areas as the core substance
- assessment and evaluation of student achievements and schools.

4. Why *National*? Why *Framework*? Why *Curriculum*?

It is **National** because it is being adopted at the national level, by consensus, and it takes into consideration national social, cultural, and economic factors, as well as the opinions of scientists, professionals, and citizens. It is therefore binding on all stakeholders throughout the implementation to act in accordance with the values and goals adopted by means of this document.

It is a **Framework** because it provides the widest framework for educational activity, i.e., teaching and learning. It regulates the education system. It is a framework because it establishes the essential, contemporary educational areas from which arise the core and differentiated curricula, i.e., subjects and subject components on their own, as well as school-wide curricula.

It is a **Curriculum** – meaning the aggregate of a child and student's growth, upbringing and education: a long-term, systematically devised, permanent, meaningfully-assembled, and harmonious organisation of the educational process which is wider and deeper than course syllabi alone. The curriculum is subject to change through the application of external evaluation and self-evaluation.

The *National Curriculum Framework* is a vehicle for the implementers of educational activities – educators, teachers, associates, and principals - as well as for the participants (stakeholders) and users of education – students, adult attendees included in education, parents, the local community, religious groups, agencies, associations/organisations, the government, social partners, political parties, professional associations, and civil organisations.

II. EDUCATIONAL VALUES AND GENERAL EDUCATIONAL GOALS

1. Socio-Cultural and Educational values

By means of education we demonstrate to students the kind of society and the kind of people that we want. Therefore, it is essential to recognise and agree on common social and cultural values as well as long-term educational goals that support and give direction to educational work. Preschool institutions and schools are expected to consider and adhere to these values and goals.

At the beginning of the 21st century, Croatian educational policy also faces the challenge and need to harmonise the local and the national with the global, to harmonise tradition with modernity, the short-term with the long-term, competition with solidarity, the accelerated growth of scientific and technological knowledge with the human abilities needed to master it, the spiritual with the material, etc.

One of the responses to the challenges and needs mentioned above is promoting key values through education – for instance, human dignity, freedom, justice, patriotism, social equality, solidarity, tolerance, industriousness, integrity, peace, health, conservation of the natural and human environment, and other democratic values. These values, on which the education system in Croatia is based, facilitate new opportunities for the development of the Croatian national, cultural, and spiritual identity in the context of globalisation.

The values that the *National Curriculum Framework* focuses on in particular are knowledge, solidarity, identity, and responsibility.

Knowledge. The Republic of Croatia has committed to the development of a knowledge-based society because knowledge is the basic driver of production and development in a society. Knowledge, education, and lifelong learning are key to the development of Croatian society; they enable individuals to better and more critically understand the society in which they live, and to cope with new circumstances and success in life and work.

Solidarity presumes a systematic training of children and youth to show concern for others; for the family; for the weak, the poor, and the underprivileged; for inter-generational care; for the natural environment; and for their overall living environment.

Identity. Education fosters the strengthening of an individual's personal, cultural, and national identity. Nowadays, in the globalisation era, in which there is a steady and powerful mixing of cultures, world views, and religions, people need to become *people of the world*, while preserving their national identities - their cultural, social, moral and spiritual heritage. In that process they should uphold and develop the Croatian language in particular, and make sure that it is used properly. Education should arouse, encourage and develop one's personal identity while linking it to a respect for differences.

Responsibility. Education incites the active participation of children and youth in social life and promotes a sense of responsibility towards the well-being of society, nature, work, the self, and others. Responsible behaviour presupposes a meaningful and conscientious relationship between personal freedom and personal responsibility.

The fundamental educational values of the *National Curriculum Framework* arise from the commitment of Croatian education policy to the complete personal development of students; to fostering and developing the national, spiritual, material, and natural heritage of the Republic of Croatia; to European co-existence; and to the creation of a knowledge-based society that will enable sustainable development.

2. Educational Goals

Educational goals in the Republic of Croatia are as follows:

- providing a systematic method of teaching students which fosters and enhances their intellectual, physical, aesthetical, social, moral, and spiritual development in keeping with their abilities and aptitudes
- developing student awareness regarding the preservation of Croatian national identity as well as the material, spiritual, historical, and cultural heritage of the Republic of Croatia
- promoting and developing awareness of the Croatian language as a key factor in Croatian identity, systematically fostering the Croatian standard (literary) language in all areas, cycles, and at all levels of the education system
- raising and educating students in conformity with general cultural and civil values, including those of human rights and rights and obligations of the child, rendering children competent to live in a multicultural world, to respect differences, and to participate actively and responsibly in the democratic development of society
- ensuring that students acquire key (general education) and vocational competences, making them able to live and work in a social and cultural context of change according to the requirements of the market economy, modern information and communication technologies, and scientific knowledge and accomplishments
- encouraging and developing independence, self-confidence, responsibility, and creativity in students
- training students for lifelong learning.

These goals should be spliced into basic educational content and everyday school life. Values and the general goals of education that arise from them are mandatory for all teachers and associates, in all education cycles, all areas and subjects, and all school and extracurricular activities.

In order for schools to be able to contribute to attaining such values and objectives, they must collaborate with families and local communities.



III. PRINCIPLES OF THE NATIONAL CURRICULUM FRAMEWORK

The principles of the *National Curriculum Framework* represent the foundations on which the national curriculum is based; all those participating in the preparation and application of the curriculum should adhere to them. In terms of substance, the principles are related to goals and expectations of achievement, and they constitute an essential element that provides for the internal consistency of the curriculum system and the collaborative action of participants in the preparation and application of the National curriculum.

The principles that constitute the value base for the preparation and realisation of the national curriculum are as follows:

- **high quality of education for all** – providing for material, technical, information-technology, hygienic, and other conditions in order to attain the highest educational standards and boost professional standards among the implementers of educational activities
- **equality of educational opportunities for all** – every child and every student has a right to his or her highest educational development; equality of educational opportunities is based on social equity; education and schooling cannot be a privilege of a minority, nor can they be reduced on the basis of discrimination (e.g., ethnic, gender, or others, based on social conditions)
- **compulsory quality of general education** – acquiring key competences is a right and obligation of every person; it provides everyone fundamental knowledge for life and is the basis for further learning; the compulsory quality of general education is a legally prescribed obligation to provide the child an education and to require student attendance up to a certain educational level
- **horizontal and vertical mobility** – providing opportunities for students to change the type of school (horizontal mobility), and extending them the possibility of continuing education at a higher level (vertical mobility)
- **inclusion of all students in the education system** – taking into consideration the educational needs of every child, student and adult person, particularly those that are exposed to marginalisation and exclusion
- **scientific foundation** – the overall education system is changing, improving and advancing at the same rate as modern scientific knowledge
- **respect for human rights and the rights of children** – true respect of every child and every adult; human dignity
- **competence and professional ethics** – educational activity implies high levels of expertise and responsibility among all implementers of educational activities
- **democracy** – pluralism and democratic decision-making; the inclusion of all key stakeholders into making and implementing educational policy
- **independence of schools** – the degree of freedom and independence that schools have in designing their own activities, programmes and projects for students, parents, teachers, and other school employees as a part of their curricula and the creation of school identity; the freedom of choice with respect to subject matter, the methods applied and the organisation of educational work in the implementation of the national curriculum
- **pedagogical and school pluralism** – the degree of freedom and independence in creating differences in pedagogical and school work
- **European dimension of education** – training for co-existence in Europe
- **interculturalism** – understanding and embracing cultural differences in order to reduce inequality and prejudice against members of other cultures.

IV. STUDENT-CENTRED EDUCATION

The *National Curriculum Framework* promotes education that is centered on the child/student. This implies the following:

- adapting educational and teaching forms, methods and work resources to the individual needs and capabilities of the students, in order to ensure successful educational performance of every individual
- a selection and application of educational forms, methods and means that will foster development in all areas of each child's/student's personality
- planning and preparation of school and teaching work according to the abilities of students, by preparing a variety of instructional content, organisational styles and paces
- accepting different styles of learning from one child/student to the next, as well as developmental differences between boys and girls, and between individual students in general
- introducing appropriate forms and methods of teaching and learning that will enable active, independent learning and the practical application of mastered topics
- using various relevant sources of knowledge and teaching aids that encourage participation, observation, independent research, experimentation, discovery, deduction, curiosity and learning *to learn*
- creating a pleasant educational environment that will incite interest and motivation in each child/student to learn, providing them with a sense of security and mutual respect
- recognition and appropriate treatment of gifted children/students, and of children/students with learning and behavioural difficulties
- providing assistance to children/students with difficulties and raising the awareness of other children and students about their needs, providing assistance and collaboration.

A curriculum approach that focuses on the development of abilities requires changes in the methods and forms of work. Open didactics-methodics systems are proposed that provide students as well as teachers the opportunity to select the content, method, forms, and conditions for attaining programmatic objectives. These are interactive systems, in other words - systems that are open to dialogue, preferences, and decision-making, - and they enable independent learning and learning on the basis of cooperative decision-making. The following methods, forms, and manners of work have been fully verified: research-based instruction, experiential instruction, project-based instruction, multimedia instruction, student-tailored instruction, interdisciplinary instruction (i.e., connecting programmatic content across disciplines, when appropriate), problem-based learning, paired learning, group learning, etc. Preference is given to social constructivism in which students, with teacher support, do their own research and build their own knowledge.

The realisation of education and instruction requires permanent collaboration and agreement between teachers, which are reached through regular discussions about the areas of common educational substance across disciplines, and an exchange of opinions on instructional methods, teaching aids and organisational possibilities.

Quality educational work on the part of pre-school institutions and schools implies regular and permanent collaboration with parents/guardians in order to establish a clear division of responsibility with respect to the achievement of educational objectives in school.

V. STRUCTURE OF THE NATIONAL CURRICULUM FRAMEWORK FOR PRE-SCHOOL EDUCATION AND GENERAL COMPULSORY AND SECONDARY EDUCATION

The *National Curriculum Framework* is structured according to educational levels and educational cycles.

1. Educational Levels

The three educational levels are pre-school education, primary general compulsory education, and secondary general compulsory education.

Pre-school education

Pre-school education constitutes the first level in the structure of the *National Curriculum Framework* and is not compulsory for all children of pre-school age. It is divided into three educational cycles (Figure 1):

- from six months to the first year of age of the child
- from the first year of age to the third year of age of the child
- from the third year of age of the child to the start of primary school.

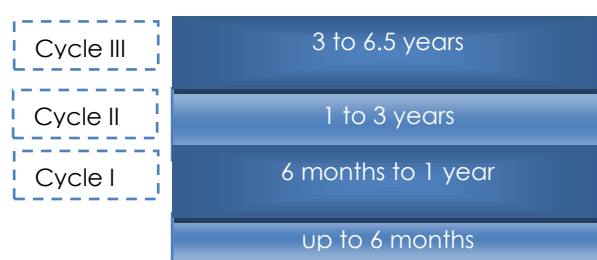


Figure 1. Education cycles of pre-school education

In line with the values, general goals, and principles of the *National Curriculum Framework*, the focus of educational activities over the course of pre-school education is directed at fostering comprehensive and sound growth and development of the child, and the development of all areas of the child's personality: physical, emotional, social, intellectual, moral, and spiritual, appropriate for the child's developmental level.

A precondition for the proper functioning of institutions of early and pre-school education is an acceptance of the understanding that parents/guardians are equal participants in institutional educational work.

General education in primary and secondary school

General education comprises the entire primary-school level and the secondary-school level, which are then split according to a ratio that depends on the type of the school. General education through primary and secondary school constitutes one whole. Since eight years of general education are not sufficient to acquire key competences, the *National Curriculum Framework* also provides for a common, general education core in secondary vocational and art schools, as well as a common core for all grammar schools.

The general education core in secondary vocational and art schools constitutes the minimum general education that the school is obliged to provide for students. The compulsory minimum of general educational content that students must learn to acquire key competences in those schools accounts for 60% and 40% of the vocational/art school curriculum in the first and second form, respectively. In the final forms of three-year and four-year vocational schools, the share of general education content in vocational curricula depends on the structure of competences as defined by applicable vocational qualifications. The share of general education content also depends on the developmental level of each student's abilities and aptitudes, as well as each teacher's assessment of individual students' abilities to continue education.

Grammar schools, as general-education secondary schools, have an entirely *general education* curriculum. For this reason, general education in these schools is wider and deeper than the compulsory general education provided in vocational schools. The *National Curriculum Framework* determines the common core for all grammar schools. Depending on the type of the grammar school, this core is deepened and widened by new subjects and modules, which are defined by the subject curricula.

2. Educational Cycles

Educational cycles are educational development periods that together comprise a student's entire general education. They include several years of schooling over the course of a specific educational level and have common educational goals, i.e., expectations of *what* a student is to accomplish during a specific development cycle. Education cycles are based on the developmental phases of students.

The *National Curriculum Framework* establishes four educational cycles for students to acquire key competences. They are as follows:

The first cycle, comprising first four grades of primary school.

The second cycle, comprising grades 5 and 6 of primary school.

The third cycle, comprising grades 7 and 8 of primary school.

The fourth cycle, which pertains to grades 1 and 2 of secondary vocational and art schools, but to grades 1 through 4 of secondary grammar schools (*gimnazija*). It should be noted that in secondary vocational and art schools, general educational content may be taught in grades 3 and 4 as well, depending on the profiles and needs of schools and students, respectively.

The fourth cycle also pertains to the acquisition of the lowest level of vocational qualifications, which means that a student may acquire the first such qualification at the age of 16.

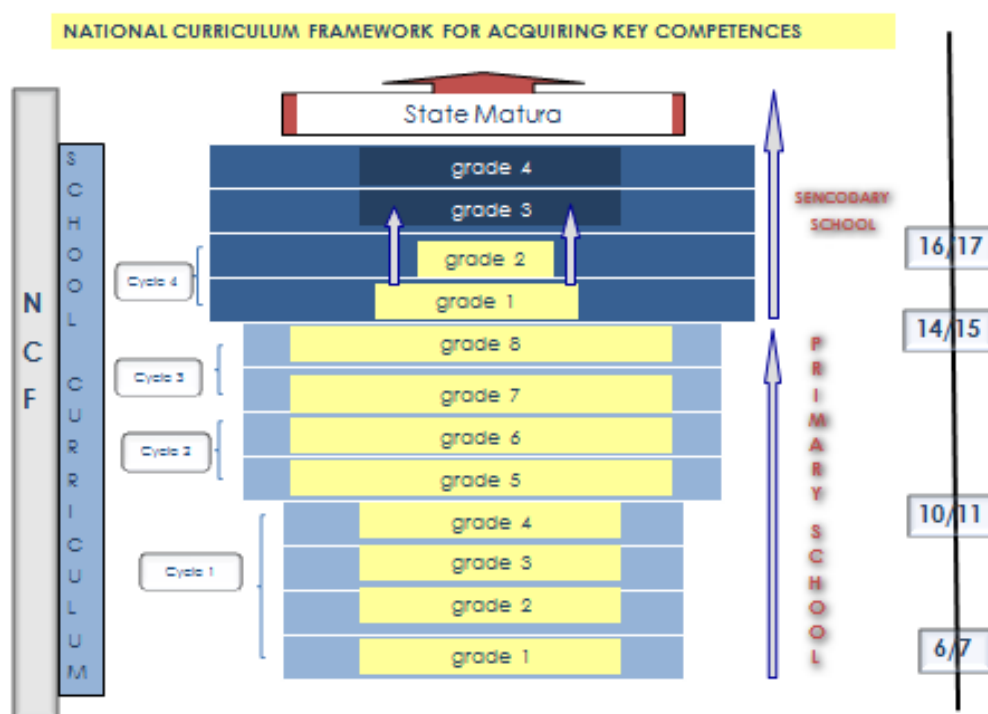


Figure 2. Educational Cycles for Acquiring Key Competences

Educational cycles are primarily used to plan and program curricula and subject content, and are guided by the principles of inter-connectivity, purposeful harmony, and clearly defined student workloads over the course of either a specific educational cycle or one school year in the core, differentiated, and school curricula. Curriculum programming implies taking into consideration interdisciplinary themes. Curriculum planning and programming presumes taking into consideration the level of each student's engagement in school (school work) and at home (homework).

In secondary vocational education the education cycles continue, depending on the level and standard of the qualification. Three-year vocational curricula may constitute one cycle (three years), and they may constitute two cycles (schematically: 2 + 1). Four-year general education curricula or vocational curricula will constitute two cycles (schematically: 2 + 2). On account of the complexity of qualifications, specific vocational curricula may last for more than four years.

General education for the key competences that are acquired in primary and secondary school is the general education foundation for acquiring vocational qualifications.

Curricula of art schools will be regulated by special regulations.

3. Structure of the National Curriculum Framework in Primary and Secondary Schools

On the basis of scientific research, modern educational trends, and the provisions of the *Strategy for Preparing and Developing the National Curriculum for Pre-School, General Compulsory, and Secondary Education* (2007), *Measures to Introduce Compulsory Secondary Education in the Republic of Croatia* (2007), and Art. 27 of the *Primary and Secondary School Education Act* (2008), the National Curriculum Framework presupposes an equal curriculum structure in primary and secondary schools. This consists of the core, differentiated and school curricula (Figure 3).

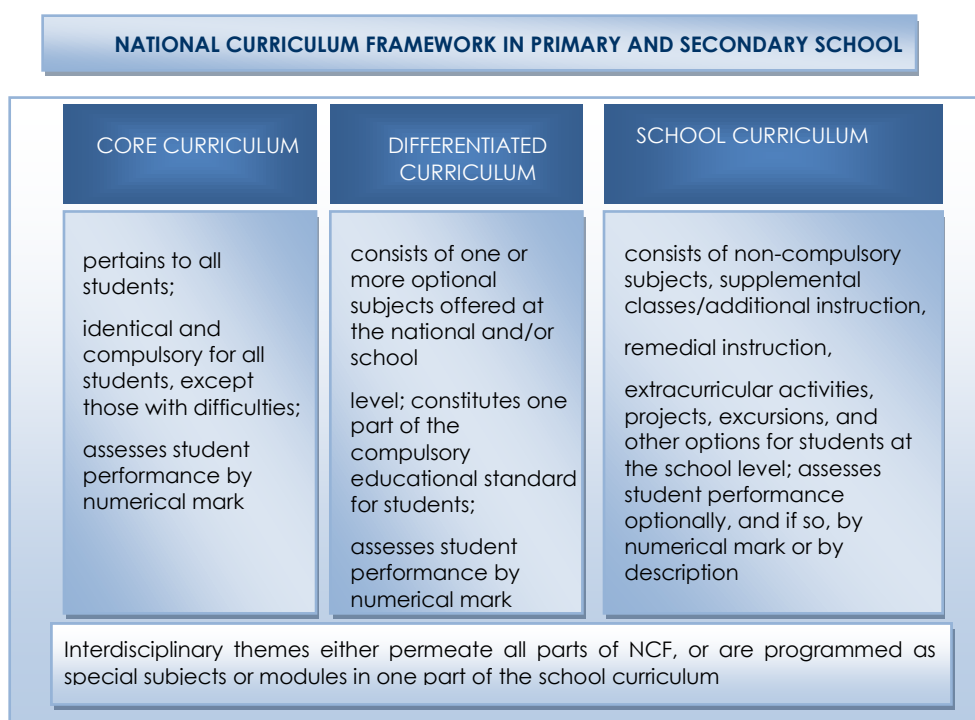


Figure 3. Structure of the National Curriculum in Primary and Secondary Schools

Primary school

The core curriculum through which students acquire key competences in primary school is identical and compulsory for all students, except for those with difficulties.

The differentiated curriculum in primary school is a cluster of optional subjects offered to students at the national and/or school level. The core and differentiated curricula constitute the educational standard for all students. Accordingly, the workload under the differentiated curriculum is the same for all students. As with the core curriculum, the differentiated curriculum is compulsory for all students, and it assesses student performance by assigning a numerical mark that is recorded in each student's school certificate.

The school curriculum refers to the methods used by the schools to implement the National Curriculum Framework, and takes into consideration the educational needs and priorities of the students, the

school, and the environment in which the school operates. It is prepared in collaboration with school employees, students, parents, and the local community. The school curriculum includes non-compulsory subjects, modules and other educational programmes, supplementary classes, additional/remedial instruction, school projects, class projects, group projects, excursions, trips, and extracurricular and extramural activities. All school curriculum programmes are non-compulsory. However, if the school curriculum facilitates for students the acquisition of specific abilities by means of non-compulsory subjects, supplementary classes/additional instruction (in, e.g., a foreign language), other services (e.g., a special curriculum for gifted students), or specific activities (e.g., entrepreneurial learning), each student's achievement may be assessed by description or by numerical mark. (This numerical mark is separate from the educational standard, and may be entered into a student's certificate supplement if the option for such is transparently published at the beginning of the school year.)

The school curriculum implies the offering of extracurricular and extramural programmes and activities that each school will prepare as part of its programming and then harmonise with its counterpart schools, taking into account the aptitudes and developmental capacities of students, the capabilities of each school, and the optimal student workload in particular.

The school curricula are published at the beginning of the school year so that students, parents, education policymakers, local communities, and the public at large are informed about them in a timely manner.

Vocational education

The core of the vocational education curriculum includes the totality of its general education and compulsory vocational education components. The general education component in the two-year educational cycle will be minimal, though it will be increased and deepened in proportion to the complexity of the qualifications in question.

The differentiated component of the vocational education curriculum comprises a cluster of optional general education and vocational education subjects that are offered to students at the national and/or school level. It is important to note that the differentiated curriculum workload should be equal for all vocational school students. The differentiated component is compulsory for all students, and it assesses student performance assigning numerical marks that is entered into each student's school certificate.

The school curriculum is made up of non-compulsory subjects and/or modules and other educational programmes, supplementary classes, remedial instruction, school projects, class projects, group projects, excursions, trips, and extracurricular and extramural activities. All school curriculum programmes are non-compulsory.

Supplementary instruction as a component of the school curriculum may be organised for students who intend to undertake higher education and will be preparing for the State Matura (secondary school exit exam). The school curriculum also facilitates the acquisition of specific abilities through non-compulsory subjects. A non-compulsory subject may be any subject that, in terms of the programme, explores subject matter with greater depth and breadth than does its nearest counterpart in the core and differentiated curricula. The school curriculum may also be a special curriculum for gifted students. It can include a specific activity that is related to a school's profile (e.g. a school that has a strong entrepreneurship programme running a trainee company). Each student's performance in the school curriculum may be assessed by means of a description or by the assignment of a numerical mark, but it does not necessarily have to be assessed. (The numerical mark is separate from the educational standard, and may be entered into a student's certificate supplement.)

The school curriculum implies the offering of extracurricular and extramural programmes and activities that each school will prepare and adjust according to the aptitudes and developmental capacities of students as well as the capabilities of the school itself.

A secondary vocational school student completes secondary education by defending a final thesis. The preparation of the final thesis is a part of the student workload, which is a component of the core and differentiated curricula.

In secondary vocational schools, students have the opportunity to qualify for higher education by taking the State Matura examination. This examination is taken at the national level according to the *State Matura exam regulation*, whereas the final thesis is prepared at school according to the *Regulation on preparing and defending the final practical thesis*.

For secondary school students who attend the vocational curriculum for at least four years, preparation for the State Matura examination takes place continually throughout the core curriculum. The differentiated and school curricula enable every student to acquire wider, deeper, and more specific

knowledge, and to develop abilities according to his or her developmental capacities and personal aptitudes.

The National Curriculum Framework provides for the monitoring and recognition of students at three-year vocational schools who have performed at above-average levels and demonstrated an interest in continuing education. For those students it is necessary to take advantage of optional and non-compulsory subjects as a form of supplementary instruction (or as a part of the school curriculum), thus enabling them to acquire wider and deeper knowledge, and to develop abilities, that will meet the requirements of the State Matura examination and prepare them for the successful continuation of education.

Secondary schools that provide general education – grammar schools

In secondary schools that provide general education, the core component is equal for all students, while the differentiated component enables students to specialise in a subject field according to the type and the curriculum of the grammar school in which they are enrolled (i.e., general, language, classical, mathematics, sports, etc.).

In grammar schools and four-year secondary schools, i.e., higher-level secondary schools, curricula will be structured according to subject (e.g., mathematics, chemistry, physics, history, the Croatian language, etc.).

A grammar school student completes secondary education by taking and passing the State Matura examination. Preparation for this examination is a continuous process that is planned and implemented throughout the grammar school general education curriculum.

4. Optional and Non-Compulsory Subjects

For the purpose of harmonising educational standards for all primary school students, it is necessary to develop a uniform student workload as well. An alternative optional subject is therefore to be introduced that will provide students with key ethical and moral competences, as well as basic knowledge about religion, for those who opt not to enrol in a traditional catechism course.

While optional subjects are compulsory and therefore an integral part of the educational standard, non-compulsory subjects are subjects that students select from a range of offered subjects/modules in the school curriculum. Unlike optional subjects, non-compulsory subjects do not mandate a choice between a limited number of alternative subjects, but instead represent unique and truly non-compulsory offers.

Non-compulsory subjects may include, for instance, Professional orientation for the future, Information and communication technology, Civil education, Cultures of speech and listening, Rhetoric, Media culture, Croatian traditional culture, Architecture, Environmental and cultural heritage, Drama education, Addiction prevention, Domestic science, Handicrafts, classical and foreign languages, and many others that the school may prepare and offer to students, taking into consideration their needs, general educational values, goals, and the development of key competences. Schools may create other subjects, modules, projects, and activities at their own discretion.

The National Curriculum Framework addresses only the SUBJECT FRAMEWORK of specific educational areas. The precise subject structure of the national curriculum, i.e., the list of compulsory, optional, and non-compulsory subjects constituting the core, differentiated and school curricula, respectively, will be determined in the next phase of national curriculum development, immediately following the preparation of the educational plan, i.e., the optimal student workload.

VI. INTERDISCIPLINARY THEMES

The planning and realisation of interdisciplinary themes represent the literal fusing of educational areas with common or complementary themes into single, harmonious wholes. They are used to foster within students a variety of key competences.

Interdisciplinary themes are compulsory in all subjects, and all implementers of educational activities in schools are obliged to implement them. It is, therefore, important to take them into consideration over the course of programming the core and differentiated curricula.

Schools are free to elaborate on proposed interdisciplinary themes, and to devise ways to implement them. The efficient development of interdisciplinary abilities among students is greater when, in addition to being incorporated into individual subjects, they are fostered through common projects or modules. The *National Curriculum Framework* describes the impetus and significance of interdisciplinary education for the achievement of national curriculum objectives.

The *National Curriculum Framework* provides for the implementation of the following interdisciplinary themes, content, and/or modules in primary and secondary schools:

- Personal and social development
- Health, safety, and environmental protection
- Learning to learn
- Entrepreneurship
- Use of information and communication technology
- Civil education.

1. Personal and Social Development

Description of the interdisciplinary theme

The purpose of teaching personal and social development is to enable students to recognise and critically assess their own opinions (as well as the impact of societal values on their own opinions and actions), to develop a sense of personal responsibility, to build positive relationships with others, and to participate constructively in social life. Education for personal and social development enables students to develop communication, organisational, and social skills and abilities, which strengthen self-respect, facilitate intercultural collaboration capabilities, and encourage mature attitudes towards others and themselves. Such education also enables students to develop abilities that are necessary for them to express and meet their own needs and aptitudes, to assess their own abilities, to make decisions, and to collaborate with others.

Objectives of the interdisciplinary theme

Students will:

- develop self-confidence and self-assurance about their own abilities and identity
- develop organisational abilities for decision-making, goal setting, problem solving, planning, and managing
- acquire skills to develop good relationships with peers, and to understand the positions and opinions of other students to make society more inclusive
- develop collaborative learning skills, including problem solving through discussion, conversation and dialogue
- develop the ability to draw connections between attitudes, actions and consequences
- accept the rules of collaborative relationships in group settings: solidarity, courtesy, mutual assistance, and accepting of differences
- fulfil assumed tasks in a responsible manner
- develop public speaking skills that are useful in group settings, in class, at gatherings, etc.).

2. Health, Safety and Environmental Protection

Description of the interdisciplinary theme

The interdisciplinary theme of health, safety and environmental protection is promoted in all educational areas, ensuring the development of a positive and responsible attitude of students towards their own and safety as well as the health and safety of others, and towards environmental protection and sustainable development. The theme encompasses all aspects of health: physical, mental, emotional, and social health. Students are encouraged to adopt a healthy lifestyle on a permanent basis – healthy and balanced diet, proper hygiene, regular and appropriate physical activities, and a responsible attitude towards the self, others, the building of relationships, sexuality, communicable diseases, etc.

Safety education gives students the tools to assess the risks, possible hazards, and consequences of risky behaviour in various areas of their lives: in traffic, when managing finances, in handling various tools/equipment/substances, both in everyday work and in social settings, etc. Students are trained to make responsible and informed decisions, and to undertake appropriate safety measures in a variety of familiar and unfamiliar situations.

Through education for environmental protection and sustainable development, students learn about the diverse relationships that exist between the natural, social, economic, and cultural dimensions of the environment. They develop an understanding for the complexity of environmental problems that arise due to changes in living standards as well as social, economic, and technological development. Students build a positive system of values with respect to ecological conservation and a rational utilisation of natural resources. In particular, they adopt values such as consideration, moderation, thrift, solidarity, self-respect and respect for other people, respect for the natural environment and its resources, respect for biological and cultural diversity, and also respect for planet Earth as a whole.

Objectives of the interdisciplinary theme

Students will:

- adopt a healthy lifestyle and understand how nutrition, physical activity and decisions about one's own behaviour and relationships with others affect physical, mental, emotional, and social health
- make informed and responsible decisions, and understand the consequences of one's own choices
- develop self-respect and self-confidence, and also develop and maintain positive, respectful relationships with other people in a variety of situations, including at work, at home and in the wider community
- acquire a knowledge and understanding of safety measures in various situations, and develop skills of safe behaviour
- be trained to recognise, assess and manage risks and hazards in various situations
- behave in a timely, composed and conscious manner in situations of crisis, helping themselves and others and knowing how and from whom to seek professional assistance
- develop a responsible attitude towards preserving the quality of environment and its resources, based on an understanding of the impact of various factors on the environment.

3. Learning to Learn

Description of the interdisciplinary theme

The purpose of developing the „learning to learn“ competence is to make students capable of efficiently organising and managing their own education, and to develop a positive attitude towards learning. The competence of learning to learn is the basis for lifelong learning. It is significant for students' further education and professional development. It includes the following elements: the ability to organise and monitor the absorption, processing, and evaluation and application of new knowledge, skills, abilities and attitudes. It also entails imparting familiarity with the strategies and methods of learning, training students for the assessment and selection of learning strategies and methods in a tailored fashion,, and enabling students to assume responsibility for their own learning and decision-making about their own educational path.

Objectives of the interdisciplinary theme

Students will:

- differentiate between facts and opinions
- know how to ask key and problem-focused questions, and how to search, assess the reliability of, and use information from various sources (such as dictionaries, atlases, encyclopaedias, the Internet, and other media)
- acquire skills of collaboration with others, knowing how to discuss topics and problems with others and arrive at common solutions
- acquire the knowledge and skills needed to plan, organise, and manage their own learning
- know how to identify specific learning techniques and strategies, and assess whether they are good for students
- develop a positive attitude towards the acquisition of new knowledge and towards learning in general
- be trained to apply acquired knowledge and skills in various situations
- take responsibility for their own learning and success so attained.

4. Entrepreneurship

Description of the interdisciplinary theme

The basic objective of developing entrepreneurial competence is equipping students with the characteristics, knowledge, skills, abilities and attitudes that will help them take initiative and be successful. Entrepreneurial competence includes organisational skills, creativity, and independence that empower individuals to accept changes and take risks. It implies social and communicative skills, a mind for economics and business administration, and an understanding of the crafts, trades, and professions that make up the business landscape. Driving the development of entrepreneurial competence education, as an interdisciplinary theme across all subjects, is an interest in developing entrepreneurs who can identify opportunities, act on their ideas, and build professional/educational/social/other ventures.

Objectives of the interdisciplinary theme

Students will:

- be trained to set, evaluate and fulfil personal goals
- know how to make and implement plans
- develop initiative and perseverance
- be trained to adapt to new situations, ideas, and technologies
- develop a creative approach towards challenges, changes, stresses, conflicts, and competition
- develop skills to evaluate themselves and others, and to constructively criticise their own success or lack thereof
- develop independence, self-confidence, and personal integrity
- get to know the professional landscape of the community and throughout wider society
- acquire basic knowledge regarding economics and business administration
- become aware of the importance of and opportunities for self-employment.

5. Use of Information and Communication Technology

Description of the interdisciplinary theme

Information and communication technology puts state-of-the-art educational aids and resources at the disposal of teachers in all educational areas. By means of multimedia display features and access to the Internet and other networks, it enables instant access to a vast and quickly growing store of information from all over the world. It also helps students learn independently, collaborate with others, and communicate with all kinds of people. It contributes to the development of a positive attitude towards learning, improving the way that students do research, solve problems and present their work. Also, the use of information and communication technology in various situations significantly contributes to an understanding of fundamental concepts in the area of engineering and ICT.

It is therefore necessary to make information and communication technology accessible to all students. They should use this technology in all subjects in order to communicate, conduct research, exchange ideas, collaborate with co-workers, and learn about the technology itself.

Objectives of the interdisciplinary theme

Students will:

- be trained to recognise and collect information for specific situations, and to evaluate the appropriateness and reliability of various information sources
- be trained to present information in a comprehensible, logical, concise manner
- use information and communication technology for the following purposes:
 - searching for and collecting data in an organised fashion
 - analysing and synthesising structured information
 - researching, modelling and simulating various processes and phenomena in nature and in society
 - solving problems in various situations
 - creating and presenting original ideas and materials
 - learning efficiently and independently with the use of a computer
 - communicating and collaborating with others
- learn about the applications of information and communication technology in society, and the consequences of such
- develop a critical attitude about the issues related to information validity and reliability, and about legal and ethical principles of interactive ICT use.

6. Civil Education

Description of the interdisciplinary theme

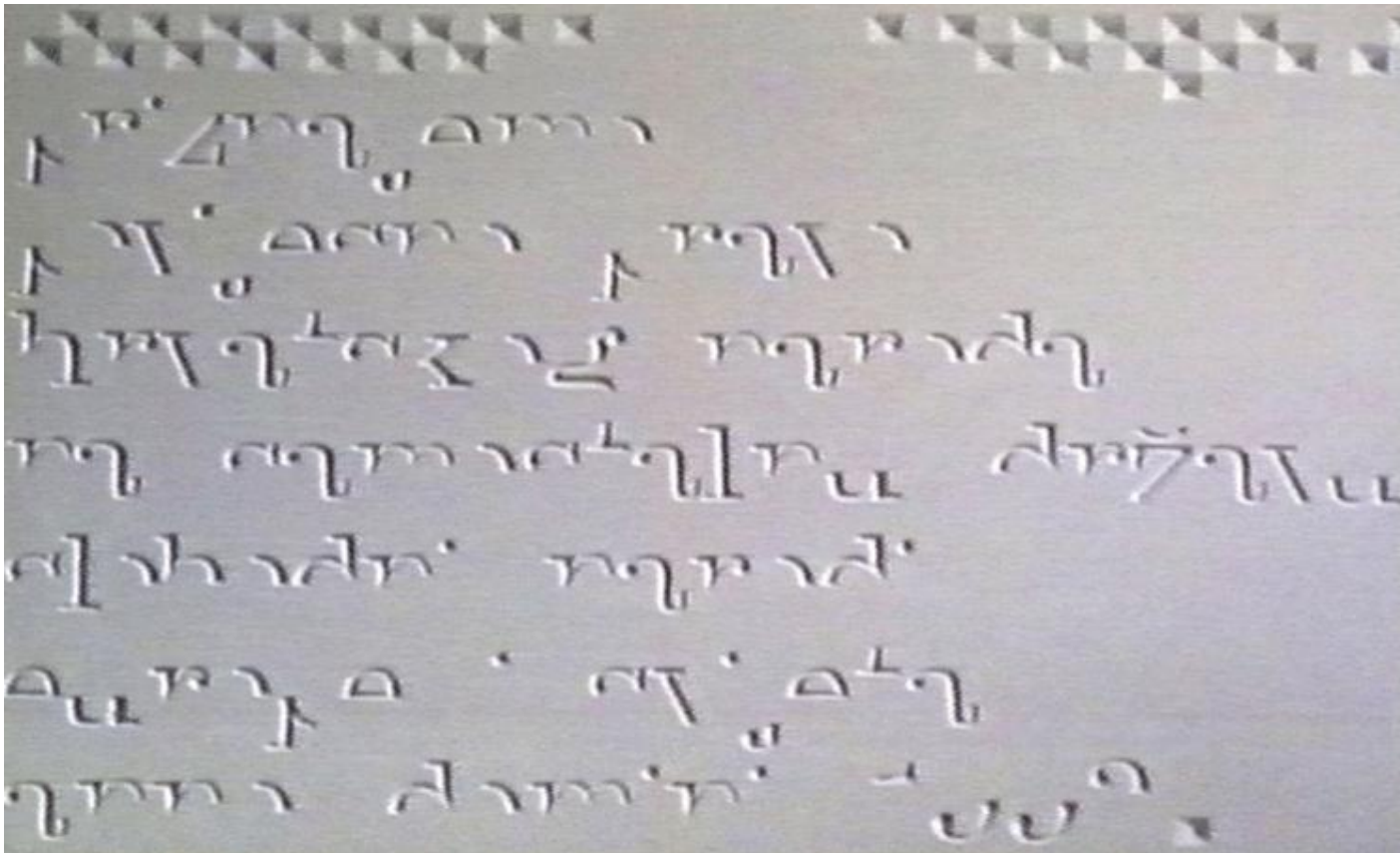
Modern democracies need working, informed and responsible citizens. The purpose of teaching civil education as an interdisciplinary theme is to prepare students for an active and effective civic life. The more significant elements of this theme include the knowledge, skills, abilities, and attitudes that develop students' democratic awareness and encourage them to help foster democratic relations in school, in the local community and throughout society. Civil education also contributes to the development of personal identity, respect for others, and problem solving skills according to democratic principles.

By becoming more familiar with themselves and their roles in society, as well as by accepting the differences of others, students develop independence, personal integrity, and positive relationships with other students and the surrounding environment. Civil education as an interdisciplinary theme will enhance collaboration within schools, families, local communities, and throughout society.

Objectives of the interdisciplinary theme

Students will:

- acquire knowledge and awareness of the importance of democratic principles, institutions and processes in their own society, throughout Europe, and at the global level
- develop a positive attitude towards as well as interest in participating in school- and community-based citizens' groups
- develop a positive attitude towards as well as interest in participating in social life as adults
- develop awareness of the rights, obligations, and responsibilities of the individual, and of the importance of equality in society, observance of the law, tolerance towards other nations/cultures/religions, and acceptance of different opinions
- be trained think critically about social phenomena
- be trained to use and assess various sources of information used to make decisions and handle responsibilities.



VII. PRE-SCHOOL EDUCATION

1. The Purpose and Importance of the Pre-School Curriculum

The basic role of pre-school education is to create conditions for the comprehensive and harmonious development of children's personalities, in turn contributing to the quality of their upbringing and, indirectly, to the quality of their family lives. The purpose of pre-school education is to provide an environment that guarantees the development of abilities within every child, and ensure that all children receive equal opportunities. In pre-school educational institutions, material conditions, staffing conditions, and a social environment promoting a high quality of life for children are created.

The *National Curriculum Framework* lays out optimal conditions for the comprehensive development of children in pre-school educational institutions, while respecting individual developmental and other factors (e.g., personal needs, family circumstances, the community, values, rights etc.). This enables the development of abilities that are important to an individual for coping and actively participating in everyday personal, professional, and social life. A whole range of activities and incentives create the basis of development for all of a child's abilities, including those of learning and independence in learning alike.

Each child's current and future well-being is what drives various stakeholders in the educational process; parents and educators in particular must understand and work with one another in order to determine and adopt shared educational goals that cater to the needs and developmental capacities of children.

2. The Structure of the Pre-School Curriculum

The basic structure of the pre-school curriculum is divided into three large categories in which children acquire abilities:

- I (the image of oneself)
- I and others (family, other children, the immediate social community, kindergarten, and the local community)
- the world around me (the natural and the wider social environment, cultural heritage, and sustainable development).

In every category the content that connects the pedagogical and psychological dimensions of the educational process is determined. Classroom conditions, content and activities ensure the stimulation of the overall physical, intellectual, psychological, emotional, moral, and spiritual development of the child.

Areas of competence dimensions

- Basic knowledge: the development of skills and abilities; learning and using the concepts according to which children understand themselves, their behaviour and choices, and their relationships with other people. Children are expected to absorb information, i.e., to build up the knowledge that enables them to communicate smoothly with peers and adults, and to respond to educational subject matter in a way that ensures adaptability to the immediate environment and to future challenges such as the start of formal education.
- Skills and abilities: the acquisition and development of the skills of learning, connecting themes, thinking logically, making arguments, reasoning deductively and solving problems; the ability to revisit one's own ideas and notions about children/childhood, and to present in a well-argued manner one's own way of thinking; the ability to identify various methods of learning, and to explain their diverse application; initiative-taking, the organisation of one's own activities and demonstrating leadership skills; the ability to understand one's own needs (e.g., physical, emotional, cognitive, social, communicative, and others) and the needs of others (and the satisfaction of such in a socially acceptable manner); the ability to establish, develop, and maintain good relationships with other children and adults through participation, negotiation and conflict resolution; understanding and observing differences between people; the ability of the child to engage in joint (concerted) activities with other children and adults; the ability to behave responsibly towards oneself, others and the environment; ethics, solidarity, trust, and tolerance in communicating with others; the ability for take initiative, and to organise and

guide one's own activities; independence in engaging in activities, forming opinions and making decisions; the ability to adjust to new, changeable circumstances (i.e., resilience and adaptability); creativity; the ability to reflect on and assess one's own work and achievements; innovation and entrepreneurial abilities.

- Values and attitudes: acceptance, nurturing, and developing family/community/societal values.

On the basis of these key determinants, individual and special curricula will be prepared in pre-school educational institutions, as will all other activities related to children of pre-school age.



VIII. EDUCATIONAL AREAS OF GENERAL COMPULSORY AND SECONDARY EDUCATION

Interdisciplinary instruction represents a comprehensive (holistic) approach to the development of student abilities. This trend is reflected in an increasingly visible organisation of curricula into wider educational areas that incorporate interdisciplinary themes. Introducing educational areas, i.e., related subject units connected by interdisciplinary themes, allows not only for the acquisition of new abilities in students, but also for better planning and drawing of conceptual connections between subjects. Educational areas and interdisciplinary themes also enable students to consider the problems that they encounter from the point of view of various disciplines or subjects.

The *National Curriculum Framework* includes the following educational areas:

- language and communication area
- mathematics area
- science area
- technical and informatics area
- social sciences and humanities area
- art area
- physical and health area.

In the *National Curriculum Framework* these educational areas list and define the key competences of students in each specific area. Pursuant to the definition of the concept of key competences in the European competence framework, key competences are reflected in the expectations of student achievement, i.e., in clearly-defined educational outcomes that represent the knowledge, skills, and attitudes that students are expected to acquire and be able to demonstrate upon the completion of a specific programme, educational cycle, or level of education.

In the *National Curriculum Framework*, expectations of student achievement for every educational area are determined at the level of education cycles, but not at the level of a specific grade. Subject curricula, i.e., course goals and expectations of student achievement, will be elaborated for each grade level after the preparation of the *National Curriculum Framework*. Determining expectations of student achievement at the level of educational areas and cycles facilitates the setting and reaching of goals in subject curricula from one grade to the next.. It also enables a more rational organisation and harmonisation of subject matter in each individual curriculum area.

Each educational area is accompanied by:

- a description of the area itself, which defines the area's purpose, importance, and contribution to the general goals, principles, and values of the *National Curriculum Framework*
- a list of educational goals, which articulates that which is expected of students in each respective area
- a list of expectations of student achievement, i.e., expected education outcomes for every educational area and cycle.

The subject structure of each educational area will be elaborated according to education cycles and grade levels in a special document.

1. The Language and Communication Area

DESCRIPTION OF THE AREA

The primary purpose of the language and communication area is to enable students to acquire knowledge, develop skills and abilities, and adopt certain values and attitudes with respect to language, communication, and culture. This means that students learn about language and communication, develop abilities and skills in standard Croatian and other languages, take an interest in reading, become effective writers, and grow to appreciate the value of various mass media while understanding how to approach it critically.

Taught as a part of the language and communication area are Croatian for native speakers, Croatian as a foreign language, national minority languages, modern foreign languages, classical foreign languages, Croatian sign language, and other languages of persons with special needs.

Language as a means of expression is the basis for all other areas and subjects over the course of education, and is often the only medium through which students receive the content of a subject. It directly impacts students' success in mastering their respective areas of study. In language and communication area subjects, meanwhile, language is both the substance and the means of learning and teaching. Mastering a language (particularly one's mother tongue, but also foreign languages) is the basis for lifelong learning.

As a means of expression and communication, language is the basis for an individual's intellectual, moral, emotional, spiritual, social, aesthetical, cultural, and physical development, and is what enables introspection, intrapersonal relationships, and community involvement, as well as social and environmental responsibility. Language is a means of expressing cultural heritage, which includes the values, norms, and customs of a specific community.

It is necessary to promote the importance of knowing the Croatian language, and of recognizing that knowledge as a general cultural good. Students should develop an appreciation towards the language of the Croatian people, its literature, and its culture, and should look after them as bastions national identity.

For native speakers of languages other than Croatian, it is important to be mindful of the same considerations for their language while promoting the necessity that Croatian be recognised – and mastered by non-native speakers residing in Croatia – as the official and state language of the Republic of Croatia. It is also important that Croatian citizens develop an appreciation for the languages, literatures, and cultures of the members of all nations living in the Republic of Croatia and Europe.

One's mother tongue is the basis for learning other languages. By means of teaching, learning, and mastering classical and modern foreign languages and becoming familiar with their cultures, students' perceptions of the world will widen in line with their general cultural and civilisation values. By acquiring multilingual and intercultural abilities, students develop awareness of the importance of learning other languages and becoming familiar with their cultures. In the same way they learn to tolerate and respect differences between cultures.

EDUCATIONAL GOALS OF THE AREA

Students will:

- learn how to verbally communicate their own thoughts, feelings, ideas, and attitudes, as well as how to interact with people in various situations, developing (self) respect in the process
- acquire the listening, speaking, reading, and writing skills needed for academic, professional, and personal life, i.e., develop the ability to communicate in various situations
- understand how a language functions and master the necessary language concepts, alphabets and dialects
- develop interest in and understanding, appreciation, and stewardship of the Croatian language, culture, and literature, and do the same with respect to the cultures, literatures, and languages of other nations in Croatia, Europe, and the world
- develop linguistic creativity and exploratory curiosity by reviewing, understanding and problem solving, thus gaining self-confidence and satisfaction with their own work and success

- understand various media languages and use them successfully in learning and communication, particularly with respect to
- information and communication technology
- know how to identify various sources of information and how to use them, assess their reliability and usefulness for studying of a specific topic, and recognise their context and authors' intentions
- become aware of the connections within the language and communication area, and between this area and other educational areas, thereby acquiring the basis for lifelong learning.

EXPECTATIONS OF STUDENT ACHIEVEMENT BY EDUCATIONAL CYCLE

A. THE CROATIAN LANGUAGE

The first cycle

I. LISTENING

1. Preparation for listening

Students will:

- select a topic, a format, sources, and a purpose for listening to simple, non-literary and literary texts, either assigned or individually selected
- differentiate between active and passive listening, using simple, non-literary and literary texts, in line with their own everyday interests and needs
- recognise and point out key words, ideas and language characteristics in simple, non-literary and literary texts, either assigned or individually selected.

2. Applying listening strategies

Students will:

- select and apply key cognitive, metacognitive, and social-affective strategies prior to and while listening to (and looking at) simple, non-literary and literary texts, either assigned or individually selected
- differentiate between and identify the necessary, significant and interesting information in simple, non-literary and literary texts, either assigned or individually selected
- acquire and apply key strategies of individual and collaborative learning both inside and outside of the classroom.

3. Listening comprehension (various sources: traditional and electronic)

Students will:

- notice and point out the key words, ideas and styles of simple, non-literary and literary texts, either assigned or individually selected
- over the course of listening, assess the content, language, and theoretical information in simple, non-literary and literary texts, either assigned or individually selected.

4. Listening for pleasure

Students will:

- acquire interest in and a positive attitude towards listening both inside and outside of the classroom
- acquire the habit of listening both inside and outside the classroom
- recognise the everyday importance of simple, non-literary and literary texts, either assigned or individually selected
- assess their selections and the pleasure they derive from them when listening to simple, non-literary and literary texts

- acquire key frameworks for developing valid personal listening preferences vis-à-vis simple, non-literary and literary texts.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the Croatian culture, their own cultures (if not Croatian), and other cultures both in their immediate surroundings and in simple, non-literary and literary texts, either assigned or individually selected
- notice and accept the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures both in their immediate surroundings and in simple, non-literary and literary texts, either assigned or individually selected.

II. SPEAKING

1. Preparation for speaking

Students will:

- organise simple speeches, on topics either assigned or individually selected, and their parts in a way that complements their respective topics and purposes, and takes into account the identity of the listener or audience
- choose key words and ideas in a way that complements their respective speech topics, purposes, and styles, and takes into account the identity of the listener or audience.

2. Applying speaking strategies

Students will:

- select and apply key cognitive, metacognitive, and social-affective strategies prior to and while giving simple speeches, on topics either assigned or individually selected
- identify and organise information that is necessary, significant and interesting for making public speeches, on topics either assigned or individually selected
- identify, organise, and apply important details and interesting information when making speeches, on topics either assigned or individually selected, in order to maintain the attention of the listener
- acquire and apply basic strategies of individual and collaborative learning inside and outside of the classroom.

3. Speech performance

Students will:

- organise and deliver basic speeches, on topics either assigned or individually selected, accompanied by the appropriate non-verbal elements of speaking for the topic and for the listener or audience in question
- master the pronunciation, vocabulary, and non-verbal elements for making public speeches, on topics either assigned or individually selected, with respect for the topic and for the listener or audience.

4. Speaking for pleasure

Students will:

- acquire interest in and a positive attitude towards speaking inside and outside of the classroom
- by means of speaking, describe their own opinions, experiences and attitudes
- assess their own speech as well as that of others, and understand how to adapt speech to the listener or the audience in various situations
- assume responsibility for spoken words in various situations.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and express themselves through verbal and non-verbal speech
- identify and accept differences and common values between the Croatian culture, their own cultures (if not Croatian), and other cultures, and speak about them using verbal and non-verbal communication.

III. READING

1. Preparation for reading

Students will:

- select a topic, format, sources, and purpose for reading either assigned or individually selected simple, non-literary and literary texts
- recognise and describe the importance of actively reading simple, non-literary and literary texts, selected in line with their own everyday interests and needs
- recognise and point out the key words, ideas, and styles of simple, non-literary and literary texts, either assigned or individually selected.

2. Applying reading strategies

Students will:

- identify and apply basic cognitive, metacognitive, and social-affective strategies prior to and while reading simple, non-literary and literary texts, either assigned or individually selected
- identify and select the necessary, significant, and interesting information in simple, non-literary and literary texts, either assigned or individually selected, in order to understand the text
- master various reading techniques as applied to simple, non-literary and literary texts, either assigned or individually selected
- acquire and apply basic strategies of individual and collaborative learning, both inside and outside of the classroom.

3. Reading comprehension (traditional and electronic format)

Students will:

- identify and describe the key words, ideas and styles found in simple, non-literary and literary texts, either assigned or individually selected
- over the course of reading, assess the content, language, and theoretical foundations of simple, non-literary, and literary texts, either assigned or individually selected
- interpret and individually assess unfamiliar non-literary and literary texts, either assigned or individually selected.

4. Reading for pleasure

Students will:

- acquire interest in and a positive attitude towards reading inside and outside of the classroom
- adopt the habit of reading inside and outside of the classroom
- recognise the everyday importance of simple, non-literary and literary texts, either assigned or individually selected
- assess their selections and the pleasure they derive from them when reading simple, non-literary and literary texts
- acquire key frameworks for developing valid personal reading preferences vis-à-vis simple, non-literary and literary texts.

5. *Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures*

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and in simple, non-literary and literary texts, either assigned or individually selected
- identify and accept the differences between Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and in simple, non-literary and literary texts, either assigned or individually selected.

IV. WRITING

1. *Preparing to write*

Students will:

- organise outlines for simple, functional, and creative compositions, on topics either assigned or individually selected, in a way that complements the topics themselves, and takes into account the identity of the listener or audience
- choose key words and ideas in line with their respective topics, purposes, and styles, taking into account the identity of the reader, listener, or audience.

2. *Applying writing strategies*

Students will:

- select and apply basic cognitive, metacognitive, and social-affective strategies prior to and while writing simple, functional, and creative compositions, on topics either assigned or individually selected
- identify and select the necessary, significant, and interesting information that they will use to write simple, functional, and creative compositions, on topics either assigned or individually selected
- organise the use of important details and interesting information when writing simple, functional, and creative compositions, on topics either assigned or individually selected, in order to maintain the attention of the reader, listener, or audience
- acquire basic strategies of individual and collaborative learning inside and outside of the classroom.

3. *Composing written texts*

Students will:

- form and write simple, functional, and creative compositions, on topics either assigned or individually selected, in a way that complements their respective topics and takes into consideration the identity of the reader, the listener, or the audience
- use proper grammar, spelling, and vocabulary to write simple, functional, and creative compositions, on topics either assigned or individually selected, in a way that complements their respective topics and takes into consideration the identity of the reader, the listener, or the audience.

4. *Writing for pleasure*

Students will:

- acquire interest in, a positive attitude towards, and the habit of writing inside and outside of an interactive didactical situation
- by writing, describe their own opinions, experiences, and attitudes
- assess their own writing as well as that of others, and understand how to adapt it to the reader, the listener, or the audience in various situations
- assume responsibility for their written compositions in various situations.

5. Becoming familiar with and respecting Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and express them in writing
- identify and accept the differences between Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them in writing.

The second cycle

I. LISTENING

1. Preparation for listening

Students will:

- select a topic, a format, sources and a purpose for listening to simple, non-literary and literary texts, either assigned or individually selected
- recognise and describe the differences between active and passive listening, using simple, non-literary and literary texts, in line with their own everyday interests and needs
- recognise and point out key words, ideas, language characteristics, and key features of style in simple, non-literary and literary texts, either assigned or individually selected.

2. Applying listening strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while listening to (and looking at) simple, non-literary and literary texts, either assigned or individually selected
- differentiate between and identify the necessary, significant and interesting information and details in simple, non-literary and literary texts, either assigned or individually selected
- acquire and apply a variety of strategies for individual and collaborative learning, both inside and outside of the classroom.

3. Listening comprehension (various sources: traditional and electronic)

Students will:

- notice and point out the key words, ideas, and linguistic features of simple, non-literary and literary texts, either assigned or individually selected
- over the course of listening, assess on various levels the content, language, and theoretical information in simple, non-literary and literary texts, either assigned or individually selected.

4. Listening for pleasure

Students will:

- acquire interest in and a positive attitude towards listening both inside and outside of the classroom
- acquire the habit of listening both inside and outside of the classroom
- recognise the everyday importance of simple, non-literary and literary texts, either assigned or individually selected
- assess their selections and the pleasure they derive from them when listening to simple, non-literary and literary texts
- acquire the key frameworks for developing valid personal listening preferences vis-à-vis simple, non-literary and literary texts.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the Croatian culture, their own cultures (if not Croatian), and other cultures both in their immediate surroundings and in simple, non-literary and literary texts, either assigned or individually selected
- notice and accept the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings and in simple, non-literary and literary texts, either assigned or individually selected.

II. SPEAKING

1. Preparation for speaking

Students will:

- organise simple speeches, on topics either assigned or individually selected, and their parts in a way that complements their respective topics and purposes, and takes into account the identity of the listener or audience
- select key words and ideas in a way that complements their respective speech topics, purposes, and styles, and takes into account the identity of the listener or audience

2. Applying speaking strategies

Students will:

- select and apply cognitive, metacognitive and social-affective strategies prior to and while giving simple speeches, on topics either assigned or individually selected
- identify and organise information that is necessary, significant and interesting, making note of important details, in order to make simple public speeches, on topics either assigned or individually selected
- identify, organise and apply important details and interesting information when making simple speeches, on topics either assigned or individually selected, in order to maintain the attention of the listener
- acquire and apply a number of strategies of individual and collaborative learning both inside and outside of the classroom.

3. Speech performance

Students will:

- organise and deliver simple speeches, on topics either assigned or individually selected, accompanied by the appropriate non-verbal elements of speaking for the topic and for the listener or audience in question
- master the pronunciation, vocabulary, and non-verbal elements for making public speeches, on topics either assigned or individually selected, taking into consideration the topic and the listener or audience.

4. Speaking for pleasure

Students will:

- acquire interest in and a positive attitude towards speaking, and will develop the habit of speaking both inside and outside of the classroom
- by means of speaking, describe their own opinions, experiences and attitudes
- assess their own speech as well as that of others, and understand how to adapt speech to the listener or the audience in various situations
- assume responsibility for spoken words in various situations.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and express themselves through verbal and non-verbal speech
- identify and accept differences and common values between the Croatian culture, their own cultures (if not Croatian), and other cultures, and speak about them using verbal and non-verbal communication.

III. READING

1. Preparation for reading

Students will:

- select a topic, format, sources and purpose for reading simple, non-literary and literary texts, either assigned or individually selected
- recognise and describe the importance of actively reading simple, non-literary and literary texts, selected in line with their own everyday interests and needs
- recognise and point out the key words, ideas, linguistic features and key stylistic features of simple, non-literary and literary texts, either assigned or individually selected.

2. Applying reading strategies

Students will:

- identify and apply a number of cognitive, metacognitive, and social-affective strategies prior to and while prior to and while reading simple, non-literary and literary texts, either assigned or individually selected
- differentiate between the necessary, significant and interesting information, and identify important details, in simple, non-literary and literary texts, either assigned or individually selected
- master various reading techniques as applied to simple, non-literary and literary texts, either assigned or individually selected
- acquire and apply a number of strategies of individual and collaborative learning both inside and outside of the classroom.

3. Reading comprehension (traditional and electronic format)

Students will:

- identify and describe the key words, ideas and linguistic features of simple, non-literary and literary texts, either assigned or individually selected
- over the course of reading, assess on various levels the content, language, and theoretical foundations of simple, non-literary and literary texts, either assigned or individually selected
- interpret and individually assess unfamiliar, simple, non-literary and literary texts, either assigned or individually selected.

4. Reading for pleasure

Students will:

- acquire interest in and a positive attitude towards reading, both inside and outside of the classroom
- adopt the habit of reading, both inside and outside of the classroom
- recognise the everyday importance of simple, non-literary and literary texts, either assigned or individually selected
- assess their selections and the pleasure they derive from them when reading simple, non-literary and literary texts
- acquire key frameworks for developing valid personal reading preferences vis-à-vis simple, non-literary and literary texts.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and in simple, non-literary and literary texts, either assigned or individually selected
- identify and accept differences between Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and in simple, non-literary and literary texts, either assigned or individually selected.

IV. WRITING

1. Preparing to write

Students will:

- organise outlines for simple, functional, and creative compositions, on topics either assigned or individually selected, in a way that complements the topics themselves, and takes into account the identity of the reader, the listener, or the audience
- select key words and ideas that compliment their respective topics, purposes and formats; take into account the listener or the audience; and differentiate between basic stylistic features of their compositions, on topics either assigned or individually selected.

2. Applying writing strategies

Students will:

- select and apply cognitive, metacognitive and social-affective strategies prior to and while writing simple, functional, and creative compositions, on topics either assigned or individually selected
- differentiate between and select the necessary, significant and interesting information, and identify important details, in order to form simple, functional, and creative compositions, on topics either assigned or individually selected
- organise the use of important details and interesting information when writing simple, functional, and creative compositions, on topics either assigned or individually selected, in order to maintain the attention of the reader, the listener, or the audience
- acquire a number of strategies of individual and collaborative learning, both inside and outside of the classroom.

3. Composing written texts

Students will:

- form and write simple, functional, and creative compositions, on topics either assigned or individually selected that take into consideration the purpose of the compositions themselves as well as the identity of the reader, the listener, or the audience
- use proper grammar, spelling, and vocabulary to write simple, functional, and creative compositions, on topics either assigned or individually selected, in a way that takes into consideration the purpose of the compositions themselves as well as the identity of the reader, the listener, or the audience.

4. Writing for pleasure

Students will:

- acquire interest in, a positive attitude towards, and the habit of writing, both inside and outside of the classroom
- by writing, describe their own opinions, experiences and attitudes
- assess their own writing as well as that of others, and understand how to adapt it to the reader, the listener, or the audience in various situations
- assume responsibility for their written compositions in various situations.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and discuss them in writing
- identify and accept the differences between Croatian culture, their own cultures (if not Croatian), and other cultures in their immediate surroundings, and discuss them in writing.

The third cycle

I. LISTENING

1. Preparation for listening

Students will:

- select a topic, a format, sources and a purpose for listening to complex, non-literary and literary texts, either assigned or individually selected
- recognize and describe the differences between active and passive listening, using complex, non-literary and literary texts, in line with their own everyday interests and needs
- recognise and define key words, ideas, linguistic details, and stylistic features of complex, non-literary and literary texts, either assigned or individually selected.

2. Applying listening strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while listening to prior to and while listening to (and looking at) complex, non-literary and literary texts, either assigned or individually selected
- differentiate between and explain the necessary, significant, and interesting information and details in more complex, non-literary and literary texts, either assigned or individually selected
- apply and explain a larger number of strategies for individual and collaborative learning, both inside and outside of the classroom.

3. Listening comprehension (various sources: traditional and electronic)

Students will:

- identify and assess according to various criteria key words, ideas, and linguistic features of more complex, non-literary and literary texts, either assigned or individually selected
- over the course of listening, assess on various levels the content, language, and theoretical information in more complex, non-literary and literary texts, either assigned or individually selected.

4. Listening for pleasure

Students will:

- acquire interest in and positive attitude towards listening both inside and outside of the classroom
- acquire the habit of listening both inside and outside of the classroom
- critically understand the everyday importance of complex, non-literary and literary texts, either assigned or individually selected
- assess their selections and the pleasure they derive from them when listening to more complex, non-literary and literary texts
- assess the validity of their own personal listening preferences vis-à-vis more complex, non-literary and literary texts.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise, differentiate between and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures both beyond their immediate surroundings and in more complex, non-literary and literary texts, either assigned or individually selected
- notice and accept the differences between the Croatian culture, their own cultures (if not Croatian) and other cultures both beyond their immediate surroundings and in more complex, non-literary and literary texts, either assigned or individually selected.

II. SPEAKING

1. Preparation for speaking

Students will:

- organise more complex speeches, on topics either assigned or individually selected, and their parts in a way that compliments their respective topics and purposes, and takes into account the identity of the listener or audience
- select key words and ideas in a way that compliments their respective speech topics, purposes, and styles, takes into account the identity of the listener or audience, and differentiates between the basic stylistic features of complex speeches, on topics either assigned or individually selected.

2. Applying speaking strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while giving complex speeches, on topics either assigned or individually selected
- identify and organise the necessary, significant, and interesting information and details in order to make more complex speeches, on topics either assigned or individually selected
- identify, organise, and apply important details and interesting information when making complex speeches, on topics either assigned or individually selected, in order to maintain the attention of the listener
- apply a larger number of strategies of individual and collaborative learning both inside and outside of the classroom.

3. Speech performance

Students will:

- organise and deliver complex speeches, on topics either assigned or individually selected, accompanied by the appropriate non-verbal elements of speaking for the topic and for the listener or the audience in question
- master the pronunciation, vocabulary, and non-verbal elements of more complex speechmaking, on topics either assigned or individually selected, taking into consideration the topic and the listener or audience.

4. Speaking for pleasure

Students will:

- acquire interest in and a positive attitude towards speaking, and will further develop the habit of speaking, both inside and outside of the classroom
- by means of speaking, describe their own opinions, experiences and attitudes
- assess their own speech as well as that of others, and understand how to adapt speech to the listener or the audience in various situations
- assume responsibility for spoken words in various situations.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own culture (if not Croatian), and other cultures beyond their own immediate surroundings, and express themselves through verbal and non-verbal communication.
- identify and accept differences and common values between the Croatian culture, their own cultures (if not Croatian), and other cultures, and speak about them using verbal and non-verbal communication.

III. READING

1. Preparation for reading

Students will:

- select a topic, format, sources and purpose for reading complex, non-literary, and literary texts, either assigned or individually selected
- recognise and explain the importance of actively reading complex, non-literary and literary texts, selected in line with their own everyday interests and needs
- recognise, define, and assess key words, ideas, linguistic features and stylistic features of more complex, non-literary and literary texts, either assigned or individually selected.

2. Applying reading strategies

Students will:

- identify, select and apply a larger number of cognitive, metacognitive, and social-affective strategies prior to and while reading complex, non-literary and literary texts, either assigned or individually selected
- differentiate between and explain the necessary, significant, and interesting information and details in more complex, non-literary and literary texts, either assigned or individually selected
- master various reading techniques as applied to more complex, non-literary and literary texts, either assigned or individually selected
- understand and apply a larger number of strategies of individual and collaborative learning, both inside and outside of the classroom.

3. Reading comprehension (traditional and electronic format)

Students will:

- identify, explain, and assess according to various criteria the key words, ideas, and linguistic features of complex, non-literary and literary texts, either assigned or individually selected
- over the course of reading, assess on various levels the content, language, and theoretical foundations of complex, non-literary and literary texts, either assigned or individually selected
- interpret and individually assess unfamiliar, complex, non-literary and literary texts, either assigned or individually selected.

4. Reading for pleasure

Students will:

- acquire an interest in and a positive attitude towards reading, both inside and outside of the classroom
- adopt the habit of reading, both inside and outside of the classroom
- form opinions about the everyday importance of more complex, non-literary and literary texts, either assigned or individually selected
- explain their selections and the pleasure they derive from reading more complex, non-literary and literary texts
- assess the validity of their own personal reading preferences with respect to more complex, non-literary and literary texts.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures beyond their immediate surroundings, and in more complex, non-literary and literary texts, either assigned or individually selected
- identify and accept the differences between Croatian culture, their own cultures (if not Croatian), and other cultures beyond their immediate surroundings, and in more complex, non-literary and literary texts, either assigned or individually selected.

IV. WRITING

1. Preparing to write

Students will:

- organise outlines for complex, functional, and creative compositions, on topics either assigned or individually selected, in a way that complements the topics themselves, and takes into account the identity of the reader, the listener, or the audience
- select and assess key words and ideas that complement their respective topics, purposes, and formats; take into account the identity of the reader, the listener, or the audience; and differentiate between basic stylistic features of their own complex, functional, and creative compositions, on topics either assigned or individually selected.

2. Applying writing strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while writing prior to and while writing more complex, functional, and creative compositions, on topics either assigned or individually selected
- select and organise necessary, significant, and interesting information, and identify important details, in order to write more complex, functional, and creative compositions, on topics either assigned or individually selected
- selectively include important details and interesting information when writing complex, functional, and creative compositions, on topics either assigned or individually selected, in order to maintain the attention of the reader, the listener, or the audience
- gain and use a larger number of strategies of individual and collaborative learning, both inside and outside of the classroom.

3. Composing written texts

Students will:

- form and write more complex, functional, and creative compositions, on topics either assigned or individually selected, that take into consideration the purpose of the compositions themselves as well as the identity of the reader, the listener, or the audience
- master the use of vocabulary and style standards when writing complex, functional, and creative compositions, on topics either assigned or individually selected, that take into consideration the purpose of the compositions themselves as well as the identity of the reader, the listener, or the audience.

4. Writing for pleasure

Students will:

- acquire interest in, a positive attitude towards, and the habit of writing, both inside and outside of the classroom - by writing, describe their own opinions, experiences, and attitudes
- assess their own writing as well as that of others, and understand how to adapt it to the reader, the listener, or the audience in various situations
- assume responsibility for their written compositions.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures beyond their own immediate surroundings, and discuss them in writing
- identify and accept the differences between Croatian culture, their own cultures (if not Croatian), and other cultures beyond their own immediate surroundings, and discuss them in writing.

The fourth cycle (vocational schools)

I. LISTENING

1. Preparation for listening

Students will:

- select a topic, a format, sources, and a purpose for listening to complex, non-literary and literary texts, either assigned or individually selected
- explain the difference between active and passive listening, using complex, non-literary and literary texts, in line with their own everyday interests and needs
- identify and explain the key words, ideas, and linguistic and stylistic features of complex, non-literary and literary texts, either assigned or individually selected.

2. Applying listening strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while listening to (and looking at) complex, non-literary and literary texts, either assigned or individually selected
- systematically identify and classify information as necessary, significant, or interesting, and point out useful and important details, prior to and while listening to (and looking at) complex, non-literary and literary texts, either assigned or individually selected
- select and justify the use of individual or collaborative learning strategies, both inside and outside of the classroom.

3. Listening comprehension (various sources: traditional and electronic)

Students will:

- systematically identify and explain the key words, ideas, and linguistic features of complex, non-literary, and literary texts, either assigned or individually selected
- over the course of listening, assess on various levels the content as well as the linguistic and theoretical information in complex, non-literary and literary texts, either assigned or individually selected.

4. Listening for pleasure

Students will:

- acquire interest in and a positive attitude towards listening in various situations and in accordance with relevant educational objectives
- acquire the habit of listening in various situations and in accordance with relevant educational objectives
- explain their selections and the pleasure they derive from them when listening to more complex, non-literary, and literary texts.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures beyond their immediate surroundings, on the basis of non-literary and literary texts, either assigned or individually selected, with regard to the place and time of the texts' origin
- behave in accordance with general human values.

II. SPEAKING

1. Preparation for speaking

Students will:

- build outlines for variously simple speeches, on topics either assigned or individually selected in accordance with the topic and purpose and the listeners or audience
- select and explain the key words, ideas, and basic stylistic features of complex speeches, on topics either assigned or individually selected, in accordance with speech topics, purposes, and formats, with the listeners or audience in mind, and in accordance with relevant educational objectives.

2. Applying speaking strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while giving complex speeches, on topics either assigned or individually selected
- systematically organise and write complex speeches, on topics either assigned or individually selected, clearly pointing out the necessary, significant, interesting, and useful information and details
- systematically select, classify, and use various types of information, in the formation of complex speeches, on topics either assigned or individually selected, in order to maintain the attention of the listeners or the audience
- apply and explain the use of individual and collaborative learning strategies, both inside and outside of the classroom.

3. Speech performance

Students will:

- organise and give complex speeches, on topics either assigned or individually selected, accompanied by appropriate non-verbal communication, taking into consideration the purpose of the speech and the identity of the listeners or the audience
- master the delivery of complex speeches, on topics either assigned or individually selected, using proper grammar and a dynamic vocabulary, taking into consideration the purpose of the speech, the relevant educational objectives, and the identity of the listeners or the audience.

4. Speaking for pleasure

Students will:

- acquire interest in and a positive attitude towards engaged participation through speech and problem-solving in various situations, and in accordance with the relevant educational objectives
- acquire the habit of speaking in various situations, taking into consideration the relevant educational objectives
- describe their own opinions, experiences and attitudes
- assess their own speeches as well as those of others, and learn to adapt their speeches to the listeners or the audience in question
- assume responsibility for their speeches.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- identify and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them using verbal and non-verbal communication
- identify, understand, and accept the differences between Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them using verbal and non-verbal communication.

III. READING

1. Preparation for reading

Students will:

- select a topic, format, sources and purpose for reading complex, non-literary and literary texts, either assigned or individually selected
- explain the importance of actively reading complex, non-literary and literary texts, selected in line with their own everyday interests and needs
- recognise, define, and assess key words, ideas, and linguistic and stylistic features of complex texts, either assigned or individually selected.

2. Applying reading strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while reading complex, non-literary and literary texts, either assigned or individually selected
- systematically identify and classify necessary, significant, and interesting information, and point out any useful and important details, prior to and while reading complex non-literary and literary texts, either assigned or individually selected
- master reading techniques with regard to complex, non-literary and literary texts, either assigned or individually selected
- understand and apply individual and collaborative learning strategies, both inside and outside of the classroom.

3. Reading comprehension (traditional and electronic format)

Students will:

- explain the difference between content- and language-related information, and systematically differentiate between and assess complex, non-literary and literary texts, either assigned or individually selected
- over the course of reading, assess on various levels the content, language, and theoretical information in complex, non-literary and literary texts, either assigned or individually selected
- interpret and assess unfamiliar texts in accordance with relevant educational objectives.

4. Reading for with pleasure

Students will:

- acquire interest in and a positive attitude towards reading in various situations, in accordance with relevant educational objectives
- acquire a habit of reading, taking into consideration relevant educational objectives
- explain their selections and the pleasure they derive from and because of reading.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures beyond their immediate surroundings, on the basis of non-literary and literary texts, taking into consideration the place and time of the texts' origin
- behave in accordance with general human values.

IV. WRITING

1. Preparing to write

Students will:

- organise outlines for complex, functional, and creative compositions, on topics either assigned or individually selected, in a way that complements the topics themselves as well as their purposes, and takes into account the identity of the readers, the listeners, or the audience
- select and assess key words and ideas that complement their respective topics, purposes, and formats; take into account the identity of the readers, the listeners, or the audience; and differentiate between basic stylistic features of their own complex, functional, and creative compositions, on topics either assigned or individually selected, in accordance with relevant educational objectives.

2. Application of writing strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while writing complex, functional, and creative compositions, on topics either assigned or individually selected
- systematically organise and write complex, functional, and creative compositions, on topics either assigned or individually selected, stressing clearly the necessary, significant, interesting, and useful information and details
- systematically identify, classify and use various types of information when writing complex, functional, and creative compositions, on topics either assigned or individually selected, in order to maintain the attention of the readers, the listeners, or the audience
- apply and explain the use of individual and collaborative learning strategies, both inside and outside of the classroom.

3. Composing written texts

Students will:

- organise and write complex, functional, and creative compositions, on topics either assigned or individually selected, taking into account the purpose of the composition itself; the readers, the listeners, or the audience; and the relevant educational objectives
- master the use of proper grammar, vocabulary, and style when writing complex, functional, and creative compositions, on topics either assigned or individually selected, taking into account the purpose of the composition itself; the readers, the listeners, or the audience; and the relevant educational objectives.

4. Writing for pleasure

Students will:

- acquire interest in and a positive attitude towards writing, both inside and outside of the classroom, according to relevant educational objectives
- by writing, describe their own opinions, experiences and attitudes
- assess their own writing and adapt it to the readers, the listeners, or the audience in various situations
- assume responsibility for their own written words in various situations.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them in writing
- identify and accept the differences between Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them in writing.

The fourth cycle (grammar schools)

I. LISTENING

1. Preparation for listening

Students will:

- select a topic, a format, sources, and purpose for listening to variously complex non-literary and literary texts, either assigned or individually selected
- explain the difference between active and passive listening, using variously complex non-literary and literary texts, selected in line with their own everyday interests and needs
- identify and explain the key words, ideas, and linguistic and stylistic features of variously complex non-literary and literary texts, either assigned or individually selected.

2. Applying listening strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies, both prior to and while listening to (and looking at) variously complex non-literary and literary texts, either assigned or individually selected
- systematically select and organise various types of information according to their own original models, both prior to and while listening to (and looking at) variously complex non-literary and literary texts, either assigned or individually selected
- apply and justify the use of individual and collaborative learning strategies, both inside and outside of the classroom.

3. Listening comprehension (various sources: traditional and electronic)

Students will:

- systematically analyse and interpret according to their own original models the key words, ideas, and linguistic features of variously complex non-literary and literary texts, either assigned or individually selected
- over the course of listening, assess on various levels the content as well as the linguistic and theoretical information in variously complex non-literary and literary texts, either assigned or individually selected.

4. Listening for pleasure

Students will:

- acquire interest in and a positive attitude towards listening in various situations, and in accordance with relevant educational objectives
- acquire the habit of listening in various situations, taking into consideration relevant educational objectives
- explain their selections and the pleasure they derive from them when listening.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures beyond their immediate surroundings, on the basis of non-literary and literary texts, either assigned or individually selected, taking into consideration the place and time of the texts' origin
- behave in accordance with general human values.

II. SPEAKING

1. Preparation for speaking

Students will:

- build outlines for variously complex speeches, on topics either assigned or individually selected, in accordance with speech topics and purposes, and taking into account the identity of the listeners or audience
- select and explain the key words, ideas, and stylistic features of variously complex speeches, on topics either assigned or individually selected, in accordance with speech topics, purposes, and formats, with the identity of the listeners or audience in mind, and in accordance with relevant educational objectives

2. Applying speaking strategies

Students will:

- apply and assess cognitive, metacognitive, and social-affective strategies prior to and while delivering variously complex speeches, on topics either assigned or individually selected
- systematically prepare and organise variously complex speeches, on topics either assigned or individually selected, according to their own original models, using various types of information and paying attention to important details
- systematically select and organise various types of information to include in variously complex speeches, on topics either assigned or individually selected, according to their own original models, in order to maintain the attention of the listeners or the audience
- devise, apply and explain the use of individual and collaborative learning strategies, both inside and outside of the classroom.

3. Speech performance

Students will:

- plan and deliver variously complex speeches, on topics either assigned or individually selected, accompanied by appropriate non-verbal elements, taking into consideration the purpose of each speech and the identity of the listeners or the audience
- master the delivery of variously complex speeches, on topics assigned or individually selected, using correct grammar and vocabulary, and taking into consideration the purpose of each speech, the relevant educational objectives, and the identity of the listeners or the audience.

4. Speaking for pleasure

Students will:

- acquire interest in and a positive attitude towards conversational engagement and problem-solving in various situations, in accordance with relevant educational objectives
- acquire a habit of speaking in various situations, with regard to relevant educational objectives
- describe their own opinions, experiences and attitudes
- evaluate their own speech and adapt it to the listeners or the audience in various situations
- assume responsibility for spoken words in various situations.

5. Becoming familiar with and observing the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- identify and accept the features of the Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them through speech and non-verbal communication
- identify and accept the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them through speech and non-verbal communication.

III. READING

1. Preparation for reading

Students will:

- select a topic, format, sources and purpose for reading variously complex non-literary and literary texts, either assigned or individually selected
- explain the importance of actively reading variously complex non-literary and literary texts, selected in line with their own everyday interests and needs
- recognise, define, and assess key words, ideas, and linguistic and stylistic features of variously complex non-literary and literary texts, either assigned or individually selected.

2. Applying reading strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while reading variously complex non-literary and literary texts, either assigned or individually selected
- systematically select and organise various types of information prior to and while reading variously complex non-literary and literary texts, either assigned or individually selected, according to their own original models
- master various reading techniques using variously complex non-literary and literary texts, either assigned or individually selected
- understand and apply individual and collaborative learning strategies, both inside and outside of the classroom.

3. Reading comprehension (traditional and electronic format)

Students will:

- systematically analyse and interpret the content and linguistic features of variously complex non-literary and literary texts, either assigned or individually selected,
- over the course of reading, assess on various levels the substance, language and theoretical information in variously complex non-literary and literary texts, either assigned or individually selected, according to their own original models
- interpret and assess unfamiliar texts in accordance with relevant educational objectives.

4. Reading for pleasure

Students will:

- acquire interest in and a positive attitude towards reading in various situations, taking into consideration the relevant educational objectives
- acquire the habit of reading, taking into consideration the relevant educational objectives
- explain their selections and the pleasure they derive from reading them.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and accept the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures beyond their immediate surroundings, on the basis of non-literary and literary texts, taking into consideration the place and time of the texts' origins
- behave in accordance with general human values.

IV. WRITING

1. Preparing to write

Students will:

- organise outlines for variously complex, functional, and creative compositions, on topics either assigned or individually selected, in a way that complements the topics themselves as well as their purposes, and takes into account the identity of the readers, the listeners, or the audience

- select and assess key words and ideas that complement their respective topics, purposes, and formats; take into account the identity of the readers, the listeners, or the audience; and differentiate between stylistic features of their own variously complex, functional, and creative compositions, on topics either assigned or individually selected, in accordance with relevant educational goals.

2. Application of writing strategies

Students will:

- select and apply cognitive, metacognitive, and social-affective strategies prior to and while writing variously complex, functional, and creative compositions, on topics either assigned or individually selected
- systematically compose and organise variously complex, functional, and creative compositions, on topics either assigned or individually selected, according to their own original models
- systematically select and organise various types of information when writing variously complex, functional, and creative compositions, on topics either assigned or individually selected, according to their own original models, in order to maintain the attention of the readers, listeners or audience
- devise, apply and justify the use of individual and collaborative learning strategies, both inside and outside of the classroom.

3. Composing written texts

Students will:

- organise and write variously complex, functional, and creative compositions, on topics either assigned or individually selected, taking into consideration the purpose of the composition itself; the identity of the readers, the listeners or the audience; and the relevant educational objectives
- master the use of proper grammar, vocabulary, and style when writing variously complex, functional, and creative compositions, on topics either assigned or individually selected, taking into consideration the purpose of the composition itself; the relevant educational objectives; and the identity of the readers, the listeners, or the audience.

4. Writing for pleasure

Students will:

- acquire interest in and a positive attitude towards writing, both inside and outside of the classroom, and in accordance with the relevant educational objectives
- through writing, describe their own opinions, experiences and attitudes
- assess their own writing and adapt it to the readers, the listeners, or the audience in various situations
- assume responsibility for their own written compositions in various situations.

5. Becoming familiar with and respecting the Croatian culture, the cultures of national minorities in the Republic of Croatia, and other cultures

Students will:

- recognise and respect the features of the Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them in writing
- identify and accept the differences between the Croatian culture, their own cultures (if not Croatian), and other cultures, and discuss them in writing.

B. FOREIGN LANGUAGES¹

The first cycle²

I. LISTENING

1. Preparation for listening

Students will:

- establish a positive attitude towards active listening in a foreign language, trying to overcome foreign language anxiety
- notice the most basic characteristics of pronunciation and intonation in a foreign language.

2. Applying listening strategies

Students will:

- apply the most basic planning and management strategies for listening, and the most basic collaborative and individual learning strategies
- use relevant vocabulary lists in their textbooks, and become familiar with and use various other resources, including electronic media.

3. Listening comprehension

Students will:

- understand short, very simple statements and texts related to their everyday lives and immediate environments, provided they are presented very slowly and clearly, and understand the most basic intentions of the speakers
- demonstrate comprehension of short, very simple foreign language audio clips, by means of appropriate verbal and non-verbal reactions

4. Listening for pleasure

Students will:

- demonstrate comprehension of and pleasure from listening by actively participating and showing appropriate reactions
- follow and react at a basic level to the content of very simple literary and non-literary audio-visual materials
- demonstrate through verbal and non-verbal reactions a positive attitude towards listening to a variety of very simple texts.

5. Listening in order to become familiar with and respect one's own culture and other cultures

Students will:

- deduce, through listening, very simple facts about the country or countries of the foreign language in question, and compare them with their own life and surroundings
- acquire the most basic habits of courteous communication in a foreign language
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance.

¹ The expectations of achievement listed here represent the minimal such expectations for students learning their first foreign language from the 1st year of primary school.

² Expectations of achievement in the first foreign language, upon students' completion of the 4th year of primary school, are devised based on the preparatory level (A1) of the *Common European Framework of Reference for Languages*. Under these arrangements it is expected that students learning the English language, given their significantly higher exposure to it in everyday situations, will probably exceed these expectations.

II. SPEAKING

1. Preparation for speaking

Students will:

- establish a positive attitude towards speaking in a foreign language, trying to overcome foreign language anxiety
- notice the most basic characteristics of pronunciation and intonation in a foreign language, properly articulating sounds, pronouncing and stressing words and phrases, and respecting the rhythm and intonation of very simple expressions
- notice the most basic differences between writing and pronouncing very simple expressions.

2. Applying speaking strategies

Students will:

- apply the most basic planning and management strategies for making spoken statements, and the most basic collaborative and individual learning strategies
- use textbook glossaries and various other resources, including electronic media.

3. Speaking

Students will:

- very simply, verbally react to audio, visual, and written materials
- understand and interpret very simple texts related to their everyday lives and immediate surroundings
- participate in various forms of speech and interaction by using very simple language.

4. Speaking for pleasure

Students will:

- develop a basic interest in speaking a foreign language, and demonstrate through appropriate verbal and non-verbal reactions speech comprehension and speech-related pleasure
- enjoy a sense of accomplishment in learning a foreign language, through speaking and/or singing very short texts of various genres and formats, and demonstrate curiosity and creativity in linguistic expression.

5. Speaking in order to become familiar with and respect one's own culture and other cultures

Students will:

- speak about what that they have learned regarding life in the country or countries of the foreign language in question
- acquire the most basic habits of courteous communication in a foreign language
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance.

III. READING

1. Preparation for reading

Students will:

- establish a positive attitude towards reading in a foreign language, trying to overcome foreign language anxiety
- read attentively and maintain focus for a certain time
- identify and master the most basic grammatical rules of the foreign languages that they are learning
- note, through speaking out loud, the difference between the spelling and phonetic pronunciation of frequently-used words.

2. Applying reading strategies

Students will:

- apply the most basic planning and management strategies for reading, and the most basic collaborative and individual learning strategies
- use relevant vocabulary lists in their textbooks and become familiar and use various other resources, including electronic media.

3. Reading comprehension

Students will:

- understand short, very simple texts related to their everyday lives and immediate surroundings
- understand and identify the significant information in short original and didactical texts.

4. Reading for pleasure

Students will:

- demonstrate a desire to read based on verbal and non-verbal reactions
- select and read various very simple literary and non-literary, original and didactical texts.

5. Reading in order to become familiar with and respect one's own culture and other cultures

Students will:

- deduce, through reading very short texts in a foreign language, simple facts about life in the country or countries of the foreign language in question, and compare them with their own lives and environments
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance.

IV. WRITING

1. Preparing for writing

Students will:

- establish a positive attitude towards writing in a foreign language
- note some of the most basic differences between a written and phonetically spoken text, and between writing in a foreign language and in the mother tongue
- master the most basic grammatical rules in a foreign language.

2. Application of writing strategies

Students will:

- apply the most basic planning and compositional strategies for writing, and the most basic collaborative and individual learning strategies
- use relevant vocabulary lists in their textbooks, and become familiar and use various other resources, including electronic media.

3. Composing written texts

Students will:

- write very short and very simple texts, including texts common in everyday communication, using very simple language
- write texts per the previous item, at various levels of independence: copying texts verbatim; adding content to pre-existing texts; writing on the basis of an audio, visual, or written template.

4. Writing for pleasure

Students will:

- develop an interest in writing very simple yet diverse texts, and demonstrate pleasure associated with such writing

- appreciate the importance of habitual writing in everyday communication
- write very short texts, experience joy at learning foreign languages, and demonstrate verbally and non-verbally curiosity and creativity in linguistic expression.

5. Writing in order to become familiar with and respect one's own culture and other cultures

Students will:

- write simple compositions concerning life in the country or countries of the foreign language in question, and comparing applicable foreign lifestyles with their own life and surroundings
- acquire the most basic habits of courteous writing in a foreign language, and write a very short text in everyday language in accordance with the cultural norms of the language being learned
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance.

V. INTERCULTURAL ACTIVITY

1. Preparing for appropriate intercultural activity

Students will:

- become aware of the existence of similarities and differences between their own culture and that/those of the foreign languages in question, based on very simple and concrete examples, in terms of their everyday lives and the meaning and use of linguistic expressions
- develop fundamental curiosity and interest in the culture/cultures of the foreign language in question
- become aware of the need for tolerance and empathy with persons from other cultures.

2. Applying strategies for appropriate intercultural activity

Students will:

- straightforwardly request or seek explanations for culturally conditioned information.

3. Applying knowledge, skills, and abilities to successful intercultural communication

Students will:

- recognise familiar situational and contextual information about their own cultures and foreign cultures
- try to apply appropriate behaviour in familiar situations
- try to react curiously and empathetically to foreign and unintelligible information, behaviour and situations.

The second cycle³

I. LISTENING

1. Preparation for listening

Students will:

- establish self-confidence and a positive attitude towards active listening in a foreign language
- notice and understand basic characteristics of pronunciation and intonation of the foreign language in relation to the mother tongue.

2. Applying listening strategies

Students will:

- apply basic planning and management strategies for listening, and basic collaborative and individual learning strategies
- use various foreign language audio resources, including the electronic media.

3. Listening comprehension

Students will:

- understand various simple texts related to their everyday lives and immediate environment, provided they are presented very slowly and clearly, and understand the most basic intentions of the speakers
- demonstrate comprehension of simple foreign language audio clips, by means of appropriate verbal and non-verbal reactions.

4. Listening for pleasure

Students will:

- demonstrate comprehension of and pleasure from listening by actively participating and showing appropriate reactions
- follow and react to the content of simple literary and non-literary audio-visual materials
- demonstrate through verbal and non-verbal reactions a positive attitude towards listening to a variety of simple texts.

5. Listening in order to become familiar with and respect one's own culture and other cultures

Students will:

- deduce, through listening, simple facts about life in the country or countries of the foreign language in question, and compare them with their own life and surroundings
- acquire habits of courteous communication in a foreign language
- recognise the importance of observing one's own culture and other cultures, based on concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

II. SPEAKING

1. Preparation for speaking

Students will:

- establish self-confidence and a positive attitude towards speaking in a foreign language
- notice basic characteristics of pronunciation and intonation in a foreign language, properly articulating sounds, pronouncing and stressing words and phrases, and respecting the rhythm and intonation of simple expressions
- notice differences between the writing out and the phonetic pronunciation of simple expressions.

³ In determining expectations of achievement in learning a second foreign language, the achievements listed here reflect expected results given fewer hours of instruction and an onset of said instruction that does not occur until the 4th year of primary school. Distinctions between the expected achievements of students learning their first and second foreign languages will be determined by subject curricula.

2. Applying speaking strategies

Students will:

- apply basic speech performance and collaborative and individual learning strategies
- use textbook glossaries, foreign language dictionaries, and other resources, including electronic media.

3. Speaking

Students will:

- verbally react to simple audio, visual, and written materials
- understand and interpret various simple texts related to their everyday lives and immediate surroundings
- participate in various forms of speech and interaction by using simple language.

4. Speaking for pleasure

Students will:

- develop a basic interest in speaking a foreign language, and demonstrate through appropriate verbal and non-verbal reactions speech comprehension and speech-related pleasure
- enjoy a sense of accomplishment in learning a foreign language, through speaking, singing, and/or dramatisation of short texts of various genres and formats, and demonstrate curiosity and creativity in linguistic expression
- participate in collaborative speech activities having cultural context in the foreign language in question, and in doing so explore their own experiences, feelings, and opinions.

5. Speaking in order to become familiar with and respect one's own culture and other cultures

Students will:

- speak about what they have learned regarding life in the country or countries of the foreign language in question, and compare this information with their own lives and surroundings
- acquire basic habits of courteous communication in a foreign language
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

III. READING

1. Preparation for reading

Students will:

- establish self-confidence and a positive attitude towards reading in a foreign language
- read attentively and maintain focus in the course of reading
- master the basic grammatical rules in a foreign language, and master pronunciation and sentence intonation when reading out loud.

2. Applying reading strategies

Students will:

- apply basic planning and management strategies for reading, and basic collaborative and individual learning strategies
- use textbook glossaries, foreign language dictionaries, and other resources, including electronic media.

3. Reading comprehension

Students will:

- understand the details of short, simple texts related to their everyday lives and immediate surroundings
- understand and identify the significant information in short original and didactical texts.

4. Reading for pleasure

Students will:

- demonstrate a desire to read based on verbal and non-verbal reactions
- select and read with interest various simple literary and non-literary, original and didactical texts, in prose or verse
- compare and contrast the content of the texts they have read with their own experiences and knowledge about the world.

5. Reading in order to become familiar with and respect one's own culture and other cultures

Students will:

- deduce, through reading very short texts in a foreign language, simple information about life in the country or countries of the foreign language in question, and compare this with their own lives and environments
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

IV. WRITING

1. Preparing for writing

Students will:

- establish self-confidence and a positive attitude towards writing in a foreign language
- note basic differences between written and phonetically spoken texts, and between writing in a foreign language and in the mother tongue
- master basic grammatical rules in a foreign language.

2. Application strategy for writing

Students will:

- apply basic planning and compositional strategies for writing, and basic collaborative and individual learning strategies
- use foreign language dictionaries and other resources, including electronic media.

3. Composing written texts

Students will:

- write short and simple texts, including texts common in everyday communication, using simple language
- write texts per the previous item, specifically, at various levels of independence: copying texts verbatim; adding content to pre-existing texts; writing on the basis of an audio, visual, or written template; and writing freely.

4. Writing for pleasure

Students will:

- develop an interest in writing simple yet diverse texts, and demonstrate pleasure associated with such writing
- demonstrate verbal and non-verbal curiosity and creativity in linguistic expression, and develop the habit of writing in everyday communication.

5. Writing in order to become familiar with and respect one's own culture and other cultures

Students will:

- write simple compositions concerning life in the country or countries of the foreign language in question, and comparing applicable foreign lifestyles with their own lives and surroundings
- acquire basic habits of courteous writing in a foreign language, and write a simple text in everyday language in accordance with the cultural norms of the language being learned
- appreciate the importance of observing their own and other cultures, based on simple and concrete examples
- recognise universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

V. INTERCULTURAL ACTIVITY

1. Preparing for appropriate intercultural activity

Students will:

- become aware of the existence of similarities and differences between their own culture and that/those of the foreign languages in question, based on simple and concrete examples, in terms of their everyday lives and the meaning and use of linguistic expressions and manners of behaviour
- feel curiosity and interest in the culture/cultures of the foreign languages in question
- become aware of the need for tolerance and empathy with persons from other cultures, and recognise the existence of stereotypes and prejudices as well as the need to eliminate them.

2. Applying strategies for appropriate intercultural activity

Students will:

- apply basic strategies to avoid and/or overcome misunderstandings, including the recognition of stereotypes and prejudices, both with the assistance of a collocutor (the teacher) and individually
- straightforwardly request, seek explanations for, or examine on their own culturally conditioned information on stereotype conceptions and other topics, with and without the assistance of a collocutor (the teacher).

3. Applying knowledge, skills, and attitudes for the purpose of successful intercultural communication

Students will:

- recognise familiar situational and contextual information about their own cultures and foreign cultures
- apply appropriate behaviour in familiar situations
- try to react curiously and empathetically to foreign and unintelligible information, behaviour and situations.

The third cycle⁴

I. LISTENING

1. Preparation for listening

Students will:

- establish self-confidence and a positive attitude towards active listening in a foreign language
- notice and understand characteristics of pronunciation and intonation, and master the differences in the pronunciation of sounds and sound groups, of the foreign language in relation to the mother tongue.

2. Applying listening strategies

Students will:

- apply cognitive, metacognitive, and social-affective strategies to listening planning and management
- independently use foreign language audio resources, including electronic media and educational programmes
- apply collaborative and individual learning strategies as well as various forms of self-assessment and mutual assessment
- understand and authoritatively interpret foreign language audio.

3. Listening comprehension

Students will:

- understand various simple as well as somewhat more complex texts related to their everyday lives and immediate environments, provided they are presented very slowly and clearly, and understand the most basic intentions of the speakers
- demonstrate comprehension of simple and somewhat more complex audio clips, by means of appropriate verbal and non-verbal reactions.

4. Listening for pleasure

Students will:

- demonstrate comprehension of and pleasure from listening by actively participating and showing appropriate reactions
- follow and react to the content of simple and somewhat more complex audio and audio-visual, literary and non-literary texts
- demonstrate, through verbal and non-verbal feedback, curiosity and a positive attitude towards listening to a variety of simple and somewhat more complex texts.

5. Listening in order to become familiar with and respect one's own and other cultures

Students will:

- deduce, through listening, simple facts about life in the country or countries of the foreign language in question, and compare them with their own lives and environments
- acquire basic habits of courteous communication in a foreign language
- recognise the importance of observing one's own and other cultures, based on concrete examples
- acquire a positive attitude towards universal human values such as friendship, collaboration, altruism, and tolerance, and become aware of the importance of active and responsible community involvement.

⁴ Expectations of achievement upon students' completion of the 8th year of foreign language instruction are based on the basic level (A2) of the *Common European Framework of Reference for Languages*. It is expected that students learning the English language, given their significantly higher exposure to it in everyday situations, will probably exceed these expectations. For expected achievements with respect to students' second foreign language, see the second cycle.

II. SPEAKING

1. Preparation for speaking

Students will:

- establish self-confidence and a positive attitude towards speaking in a foreign language
- notice characteristics of pronunciation and intonation of a foreign language, properly articulating sounds, pronouncing and stressing words and phrases, and respecting the rhythm and intonation of simple as well as somewhat more complex expressions
- notice differences between the writing out and the phonetic pronunciation of simple and somewhat more complex expressions.

2. Applying speaking strategies

Students will:

- apply cognitive, metacognitive, and social-affective strategies in speechmaking, as well as collaborative and individual learning strategies
- use foreign language textbooks, dictionaries, and other resources, including electronic media and educational programmes.

3. Speaking

Students will:

- verbally react to simple and somewhat more complex audio, visual, and written materials related to their everyday lives and immediate surroundings, using appropriately simple language structures
- interpret what they have learned and explain their own attitudes towards it in simple terms
- participate in various forms of speech and interaction, using simple as well as somewhat more complex language.

4. Speaking for pleasure

Students will:

- develop an interest in speaking in a foreign language, and demonstrate through appropriate verbal and non-verbal feedback speech comprehension and speech-related pleasure
- enjoy a sense of accomplishment in learning a foreign language, through speaking, singing, and/or dramatisation of short texts of various genres and formats, and demonstrate curiosity and creativity in linguistic expression
- participate in collaborative speech activities having cultural context in the foreign language in question, and in doing so explore their own experiences, feelings, and opinions.

5. Speaking in order to become familiar with and respect one's own culture and other cultures

Students will:

- speak about what they have learned regarding life in the country or countries of the foreign language in question, and compare this information with their own lives and surroundings
- apply basic habits of courteous communication in a foreign language
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- acquire a positive attitude towards universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active and responsible community involvement.

III. READING

1. Preparation for reading

Students will:

- establish self-confidence and a positive attitude towards reading in a foreign language
- read attentively and maintain focus in the course of reading

- master spelling and grammatical rules in a foreign language, and master pronunciation and sentence intonation when reading out loud.

2. Applying reading strategies

Students will:

- apply cognitive, metacognitive, and social-affective strategies for reading planning and management
- use foreign language textbooks, dictionaries, and other resources, including electronic media and educational programmes
- apply collaborative learning strategies as well as self-assessment and mutual assessment methods.

3. Reading comprehension

Students will:

- understand the details in simple as well as somewhat more complex, albeit short, original and didactic texts about familiar topics in which everyday vocabulary is used
- interpret what they have learned from reading, and critically assess the written content and the author's intentions
- notice basic features of various genres and formats of texts.

4. Reading for pleasure

Students will:

- demonstrate a desire to read through verbal and non-verbal feedback
- select and read with interest a variety of simple and somewhat more complex, literary and non-literary, original and didactical texts, in prose or verse, and enjoy the sense of accomplishment that comes from reading in a foreign language
- compare and contrast the content of the texts they have read with their own experiences and knowledge about the world.

5. Reading in order to become familiar with and respect one's own culture and other cultures

Students will:

- deduce, through reading very short texts in a foreign language, simple facts about life in the country or countries of the foreign language in question, and compare them with their own lives and environments
- appreciate the importance of observing their own and other cultures, based on very simple and concrete examples
- acquire a positive attitude towards universal human values such as friendship, collaboration, altruism, and tolerance, and become aware of the importance of active and responsible community involvement.

IV. WRITING

1. Preparing for writing

Students will:

- establish self-confidence and a positive attitude towards writing in a foreign language
- note differences between simple and somewhat more complex foreign language texts, and between writing in a foreign language and in the mother tongue
- master spelling and grammatical rules in a foreign language.

2. Application of writing strategies

Students will:

- apply cognitive, metacognitive, and social-affective strategies when planning and composing written texts, as well as of collaborative and individual learning strategies

- use foreign language dictionaries and other resources, including electronic media and educational programmes.

3. Composing written texts

Students will:

- write short and simple texts, including texts common in everyday communication, using simple as well as somewhat more complex language
- write texts per the previous item at various levels of independence: adding content to pre-existing texts; writing on the basis of an audio, visual, or written template; and writing freely
- interpret and make independent deductions based on what they have learned
- discuss their own experiences, feelings, and opinions.

4. Writing for pleasure

Students will:

- develop an interest in writing simple yet diverse texts, and demonstrate pleasure associated with such writing
- demonstrate verbal and non-verbal curiosity and creativity in linguistic expression, and develop the habit of writing in everyday communication.

5. Writing in order to become familiar with and respect one's own culture and other cultures

Students will:

- write compositions concerning life in the country or countries of the foreign language in question, and comparing applicable foreign lifestyles with their own lives and surroundings
- apply habits of courteous communication when writing in a foreign language, and write a short text in everyday language in accordance with the cultural norm of the language being learned
- appreciate the importance of observing their own and other cultures, based on simple and concrete examples
- acquire a positive attitude towards universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active and responsible community involvement.

V. INTERCULTURAL ACTIVITY

1. Preparing for appropriate intercultural activity

Students will:

- become aware of the existence of similarities and differences between their own culture and that/those of the foreign languages in question, based on simple and concrete examples, in terms of their everyday lives and the meaning and use of linguistic expressions and manners of behaviour
- become aware of the need for tolerance and empathy towards persons from other cultures, and recognise the existence of stereotypes and prejudices as well as the need to eliminate them.
- become aware of their own culture's impact on their perceptions of their own and foreign cultures, of the universal impact of culture on communication, and of social patterns, diversity, change, and development as significant features of culture.

2. Applying strategies for appropriate intercultural activity

Students will, with the occasional assistance of a collocutor (teacher):

- make and verify the accuracy of assumptions about the reasons for similarities and differences between their own cultures and that/those of the foreign languages in question
- apply basic strategies to avoid and/or overcome misunderstandings, including the recognition of stereotypes and preconceptions about their own and other cultures

- request, look for and/or examine in a simple manner additional information in order to understand cultural impacts on such phenomena as the propagation of stereotypes.

3. Applying knowledge, skills and attitudes for the purpose of successful intercultural communication

Students will:

- connect what they know about their own and foreign cultures with new situations and contexts, and think critically about these connections
- try to use what they have learned about culture and intercultural communication to interpret foreign phenomena without passing value judgments
- apply appropriate behaviour in familiar situations and new behaviours in unknown situations
- try to react openly, curiously, and empathetically to foreign and unintelligible information, behaviour, and situations.

The fourth cycle (vocational schools)⁵

I. LISTENING

1. Preparation for listening

Students will:

- establish self-confidence and a positive attitude towards active listening in a foreign language
- establish an initial interest and motivate themselves to learn the language of a profession
- understand characteristics of pronunciation and intonation, and master the differences in the pronunciation of sounds and sound groups, of the foreign language in relation to the mother tongue.

2. Applying listening strategies

Students will:

- apply a larger number of cognitive, metacognitive and social-affective strategies to listening planning and management
- independently use a foreign language, including electronic media and educational programmes
- apply collaborative and individual learning strategies as well as various forms of self-assessment and mutual assessment.

3. Listening comprehension

Students will:

- understand somewhat complex texts, in standard language, about familiar general and professional topics that they frequently encounter in school, at work, with their families, during their leisure time, and elsewhere
- demonstrate comprehension of somewhat more complex audio clips, by means of verbal and non-verbal feedback
- critically assess the content of a text and the intention of its author, and interpret the results of their assessments.

4. Listening for pleasure

Students will:

⁵ Expected achievements at the end of the 2th year of vocational school are determined at the intermediate level, between and the interlevel (A2+) according to the *Common European Framework of Reference for Languages*. In vocational schools providing an increased number of hours of foreign language instruction, these expected achievements will also have to be made more complex. In determining the achievement expectations of students learning a second foreign language continuously from the 4th year of primary school, the achievements specified here should be adjusted to reflect the lower number of classroom hours that students received in the previous years. In determining the achievements expected of students just starting to learn a foreign language, the baseline may be the expected achievements specified for the individual cycles in primary school. Solidifying the distinctiveness of students' achievement expectations in their first, second, and third foreign languages will be determined by subject curricula, while additional details will reflect the curriculum of the school in question.

- demonstrate comprehension of and pleasure from listening to audio texts by actively participating and showing appropriate reactions
- follow and react to the content of somewhat more complex audio and audio-visual, literary and non-literary texts
- demonstrate, through verbal and non-verbal feedback, curiosity and a positive attitude towards listening to a variety of somewhat more complex texts.

5. Listening in order to become familiar with and respect one's own and other cultures

Students will:

- acquire, through listening, basic socio-cultural orientational knowledge, and compare it with their own lives, surroundings and envisioned professions
- acquire and apply basic habits of courteous communication in a foreign language
- respect their own culture and other cultures
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

II. SPEAKING

1. Preparation for speaking

Students will:

- establish self-confidence and a positive attitude towards speaking in a foreign language
- understand characteristics of pronunciation and intonation of a foreign language, properly articulating sounds, pronouncing and stressing words and phrases, and respecting the rhythm and intonation of somewhat more complex expressions
- differentiate between writing and phonetically pronouncing somewhat more complex expressions.

2. Applying speaking strategies

Students will:

- apply a higher number of cognitive, metacognitive, and social-affective strategies in speechmaking, as well as collaborative and individual learning strategies
- use foreign language dictionaries, standard dictionaries written in foreign languages, and other resources, including electronic media and educational programmes.

3. Speaking

Students will:

- verbally react to various somewhat more complex audio, visual, and written materials related to their everyday lives and immediate surroundings, using appropriate, somewhat more complex language structures
- interpret and explain what they have learned in simple terms
- participate in various forms of somewhat more complex speech and interaction, including simple professionally-oriented activities.

4. Speaking for pleasure

Students will:

- develop an interest in speaking in a foreign language, and demonstrate speech-related pleasure through appropriate verbal and non-verbal feedback
- enjoy a sense of accomplishment in learning a foreign language, through speaking, singing, and/or dramatisation of short texts from their own professions and areas of interest, and demonstrate curiosity and creativity in linguistic expression
- participate in a number of collaborative speech activities having cultural context in the foreign language in question, and in doing so discuss their experiences, feelings, and opinions.

5. Speaking in order to become familiar with and respect one's own and other cultures

Students will:

- in spoken statements, use the socio-cultural orientational knowledge that they have learned about the country/countries of the foreign language in question, and compare it with the circumstances of their own lives, surroundings, and envisioned professions
- apply basic habits of courteous communication in a foreign language, in both formal and informal situations
- respect their own and other cultures
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

III. READING

1. Preparation for reading

Students will:

- establish self-confidence and a positive attitude towards reading in a foreign language, and motivate themselves to learn the language of a profession
- read with attention and maintain focus in the course of reading
- differentiate between writing and phonetically pronouncing somewhat more complex expressions
- master the grammatical rules in a foreign language, as well as sentence intonation when reading out loud.

2. Applying reading strategies

Students will:

- apply a higher number of cognitive, metacognitive, and social-affective strategies for reading planning and management
- use foreign language dictionaries, standard dictionaries written in foreign languages, and other text resources, including electronic media and educational programmes
- identify the key ideas in a written argument, and the development of the argument itself
- apply various collaborative and individual learning strategies, as well as various forms of self-assessment and mutual assessment.

3. Reading comprehension

Students will:

- understand somewhat more complex original and didactic texts, in detail, having to do with their own areas of interest
- critically assess the content of a text and the intention of its author, and interpret the results of their assessments
- notice the features of various genres and formats of texts.

4. Reading for pleasure

Students will:

- demonstrate a desire to read through verbal and non-verbal feedback
- select and read with interest shorter literary and non-literary, original and didactic texts, including texts on professional topics, and enjoy the sense of accomplishment that comes from reading in a foreign language
- compare and contrast the content of the texts they have read with their own experiences and knowledge about the world, and with their own envisioned professions.

5. Reading in order to become familiar with and respect one's own and other cultures

Students will:

- acquire essential socio-cultural orientational knowledge, and compare what they have learned with the circumstances of their own lives, environments and envisioned professions
- respect their own culture and other cultures
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

IV. WRITING

1. Preparing for writing

Students will:

- establish self-confidence and a positive attitude towards writing in a foreign language
- note the differences between phonetically spoken and somewhat more complex written texts, and between writing in a foreign language and in the mother tongue
- master the spelling/orthographic rules in a foreign language.

2. Application of writing strategies

Students will:

- apply a greater number of cognitive, metacognitive, and social-affective strategies when planning and writing compositions, as well as collaborative and individual learning strategies
- use foreign language dictionaries, standard dictionaries written in foreign languages, and other resources, including electronic media and educational programmes.

3. Composing written texts

Students will:

- write simple compositions about familiar and topical subjects, and about topics with simpler professional content, using somewhat more complex language structures
- write compositions per the previous item, at various levels of independence (adding content to pre-existing texts; writing on the basis of an audio, visual, or written template; and writing freely)
- interpret and make independent deductions based on what they have learned
- discuss and explain their experiences, feelings, opinions, attitudes, and plans, as well as present, past and future events.

4. Writing for pleasure

Students will:

- establish interest in and a positive attitude towards writing a variety of compositions, and demonstrate pleasure arising from writing
- demonstrate curiosity and creativity in language expression, both verbally and non-verbally
- apply the habit of writing in everyday communication.

5. Writing in order to become familiar with and respect one's own and other cultures

Students will:

- use their own socio-cultural orientational knowledge to write about the country/countries of the foreign language in question, and compare life in those places with their own lives, surroundings, and envisioned professions
- apply habits of courteous communication when writing in a foreign language, and write a short, somewhat more complex, composition using everyday language in accordance with the cultural norms of the foreign language in question
- respect their own culture and other cultures
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

V. INTERCULTURAL ACTIVITY

1. Preparing for appropriate intercultural activity

Students will:

- accept the need for tolerance and empathy towards persons from other cultures, and recognise the existence of stereotypes and prejudices as well as the need to eliminate them
- become aware of their own culture's impact on their perceptions of their own and foreign cultures, of the universal impact of culture on communication, and of social patterns, diversity, change, and development as significant features of culture
- become aware of the potential for miscommunication in intercultural communication.

2. Applying strategies for appropriate intercultural activity

Students will:

- either independently or with the assistance of a collocutor (the teacher), note the similarities and differences between their own cultures and that/those of the foreign language in question, in aspects of their everyday lives or a specific profession, and in the meaning and use of linguistic expressions and manners of behaviour
- either independently or with the assistance of a collocutor (the teacher), make and verify the accuracy of assumptions about the reasons for similarities and differences between their own cultures and that/those of the foreign language in question
- either independently or with the assistance of a collocutor (the teacher), apply strategies for maintaining and re-establishing broken communication, and for avoiding and/or overcoming misunderstandings, both of which include recognizing and noticing stereotypes and preconceptions about their own and foreign culture/cultures
- either independently or with the assistance of a collocutor (the teacher), react more flexibly in communication and, in a somewhat more complex manner, request, search for, and/or explore additional information in order to understand cultural impacts on such phenomena as the propagation of stereotypes.

3. Applying knowledge, skills and attitudes for the purpose of successful intercultural communication

Students will:

- connect what they know about their own and foreign cultures with new situations and contexts, and think critically about these connections
- try to use what they have learned about culture and intercultural communication to interpret foreign phenomena without passing value judgments
- apply appropriate behaviour in familiar situations and new behaviours in unknown situations
- react openly, curiously, and empathetically to foreign and unintelligible information, behaviour, and situations.

The fourth cycle (grammar schools)⁶

I. LISTENING

1. Preparation for listening

Students will:

- establish self-confidence and a positive attitude towards active listening in a foreign language
- understand and master the subtleties of phonetic pronunciation and intonation in a foreign language
- note the phonetic differences between standard speech and dialects in a foreign language.

2. Applying listening strategies

Students will:

- apply a wide array of cognitive, metacognitive, and social-affective strategies for listening planning and management
- use various foreign language audio resources, including electronic media and educational programmes
- apply various collaborative and individual learning strategies as well as various forms of self-assessment and mutual assessment.

3. Listening comprehension

Students will:

- understand various complex texts, in standard language, related to their everyday lives and topics of personal, general, and professional interest
- verbally and non-verbally react to complex audio clips
- demonstrate comprehension of complex audio clips through verbal and non-verbal feedback
- critically assess the content of a text and the intention of its author, and interpret the results of their assessments.

4. Listening for pleasure

Students will:

- demonstrate listening comprehension of audio clips and express pleasure through appropriate feedback
- follow and react to the contents of various complex audio and audio-visual, literary and non-literary texts
- demonstrate, through verbal and non-verbal feedback, curiosity and a positive attitude towards listening to various complex audio clips.

5. Listening in order to become familiar with and respect one's own and other cultures

Students will:

- acquire, through listening, essential socio-cultural orientation knowledge, and compare it with their own lives and greater surroundings
- acquire and apply habits of courteous communication in a foreign language
- respect their own culture and other cultures

⁶ Expectations of achievement at the end of grammar school are determined at the intermediate level, between interlevel and the individual level (B1+), according to the *Common European Framework of Reference for Languages*. In grammar school programmes providing an increased number of foreign language instruction hours, these expectations of achievement will have to be made more complex. The same applies to expectations of achievement in the English language, considering the significantly greater exposure to that language that students get in their everyday environment. In determining the expectations of achievement for students learning a second foreign language continuously from the 4th year of primary school, as well as for those just starting to learn of a foreign language, both as compared with the distinct expectations of achievement for students learning their first, second and third foreign languages, refer to the footnote under the 4th cycle (secondary vocational and art schools).

- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

II. SPEAKING

1. Preparation for speaking

Students will:

- establish self-confidence and a positive attitude towards speaking in a foreign language
- clearly grasp the subtleties of pronunciation and intonation in a foreign language, and properly articulate sounds, pronounce and stress words and phrases, and respect the rhythm and intonation of complex expressions
- differentiate between writing and phonetically pronouncing complex expressions.

2. Applying speaking strategies

Students will:

- apply a wide array of cognitive, metacognitive, and social-affective strategies in speechmaking, and also various collaborative and individual learning strategies
- use foreign language dictionaries, standard dictionaries written in foreign languages, and other resources, including electronic media and educational programmes.

3. Speaking

Students will:

- verbally react to various complex audio, visual, written, and graphic materials related to their everyday lives and to topics of personal, general, and professional interest, using appropriate, more complex language structures
- interpret, explain, and critically discuss what they have learned
- participate independently in various forms of complex speech and interaction, including spontaneous conversation with a collocutor, using fluent and clear speech.

4. Speaking for pleasure

Students will:

- acquire interest in and a positive attitude towards speaking and, through appropriate verbal and non-verbal feedback, demonstrate speech comprehension and enjoyment
- enjoy a sense of accomplishment in learning a foreign language, through speaking, singing, and/or dramatisation of texts from their own professions and areas of interest, and demonstrate curiosity and creativity in linguistic expression
- participate in a number of collaborative speech activities having cultural context in the foreign language in question, and in doing so discuss their experiences, feelings, and opinions.

5. Speaking in order to become familiar with and respect one's own and other cultures

Students will:

- in spoken statements, use the socio-cultural orientational knowledge that they have learned about the country/countries of the foreign language in question, and compare it with the circumstances of their own lives and greater surroundings
- apply habits of courteous communication in a variety of foreign language situations
- respect their own culture and other cultures
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

III. READING

1. Preparation for reading

Students will:

- establish self-confidence and a positive attitude towards reading in a foreign language
- read attentively and maintain focus in the course of reading
- differentiate between writing and phonetically pronouncing complex expressions
- confidently master the grammatical rules in a foreign language, as well as sentence intonation when reading out loud.

2. Applying reading strategies

Students will:

- apply a wide array of cognitive, metacognitive, and social-affective strategies for reading planning and management
- use foreign language dictionaries, standard dictionaries written in foreign languages, and other text resources, including electronic media and educational programmes
- identify the key ideas in a written argument, and the development of the argument itself
- apply various collaborative and individual learning strategies, as well as forms of self-assessment and mutual assessment.

3. Reading comprehension

Students will:

- understand complex original and didactic texts, in detail, having to do with topics of their own personal and professional interest
- critically assess the content of a text and the intention of its author, and interpret the results of their assessments
- differentiate between the features of a wide array of literary and non-literary text genres and formats.

4. Reading for pleasure

Students will:

- demonstrate a desire to read through verbal and non-verbal feedback
- select and read with interest literary and non-literary, original and didactic texts in prose or verse, and enjoy the sense of accomplishment that comes from reading in a foreign language
- compare and contrast the content of the texts they have read with their own experiences and knowledge about the world.

5. Reading in order to become familiar with and respect one's own and other cultures

Students will:

- acquire essential socio-cultural orientation knowledge, and compare what they have learned with the circumstances of their own lives and greater surroundings
- respect one's own culture and other cultures
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

IV. WRITING

1. Preparing for writing

Students will:

- establish self-confidence and a positive attitude towards writing in a foreign language
- note the differences between phonetically spoken and complex written texts, and between writing in a foreign language and in the mother tongue

- confidently master the grammatical rules in a foreign language.

2. Application of writing strategies

Students will:

- apply a wide array of cognitive, metacognitive, and social-affective strategies when planning and writing compositions, as well as collaborative and individual learning strategies
- use foreign language dictionaries, standard dictionaries written in foreign languages, and other resources, including electronic media and educational programmes.

3. Composing written texts

Students will:

- write complex compositions of various genres and formats, including everyday communicational compositions, and use more complex language structures in doing so
- write compositions per the previous item at various levels of independence (adding content to pre-existing texts; writing on the basis of an audio, visual, or written template; and writing freely)
- interpret and make independent deductions based on what they have learned
- discuss and explain their own experiences, feelings, opinions, attitudes, and plans, as well as present, past and future events.

4. Writing for pleasure

Students will:

- establish interest in and a positive attitude towards writing a variety of compositions, and demonstrate pleasure arising from writing
- demonstrate curiosity and creativity in language expression, both verbally and non-verbally
- apply the habit of writing in everyday communication.

5. Writing in order to become familiar with and respect one's own and other cultures

Students will:

- acquire essential socio-cultural orientational knowledge to write about the country/countries of the foreign language in question, and compare life in those places with their own lives and greater surroundings
- apply habits of courteous communication when writing in a foreign language, and write a more complex composition using everyday language in accordance with the cultural norms of the foreign language in question
- respect their own culture and other cultures
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and wish to become actively and responsibly involved in their communities.

V. INTERCULTURAL ACTIVITY

1. Preparing for appropriate intercultural activity

Students will:

- accept the need for tolerance and empathy towards persons from other cultures, and recognise the existence of stereotypes and prejudices as well as the need to eliminate them
- become aware of their own culture's impact on their perceptions of their own and foreign cultures, of the universal impact of culture on communication, and of social patterns, diversity, change, and development as significant features of culture
- become aware of the potential for miscommunication in intercultural communication.

2. Applying strategies for appropriate intercultural activity

Students will:

- note the similarities and differences between their own cultures and of that/those of the foreign language in question, in aspects of their everyday lives and greater surroundings, and in the meaning and use of linguistic expressions and manners of behaviour

- independently make and verify the accuracy of assumptions about the reasons for the similarities and differences between their own cultures and that/those of the foreign language in question
- independently apply various strategies for maintaining and re-establishing broken communication, and for avoiding and/or overcoming misunderstandings, both of which include recognizing and noticing stereotypes and preconceptions about their own and foreign culture/cultures
- react flexibly in communication, and independently request, search for and/or explore additional information in order to understand cultural impacts on such phenomena as the propagation of stereotypes
- recognise and notice, both explicitly and implicitly, the cultural norms that impact communications-oriented situations, resources, and phenomena.

3. Applying knowledge, skills and attitudes for purpose of a successful intercultural communication

Students will:

- connect what they know about their own and foreign cultures with new situations and contexts, and think critically about these connections
- use what they have learned about culture and intercultural communication to interpret foreign phenomena without passing value judgments
- apply appropriate behaviour in familiar situations and new behaviours in unknown situations
- react openly, curiously, and empathetically to foreign and unintelligible information, behaviour, and situations.

C. CLASSICAL LANGUAGES⁷

The first cycle

This cycle does not include classical language instruction.

The second cycle

I. READING and WRITING

1. Understanding rules for reading and writing

Students will:

- note the basic characteristics of pronunciation and spelling in a classical language
- acquire a positive attitude towards reading and writing in a classical language, and try to overcome foreign language anxiety
- identify the different thought processes involved in reading and writing.

2. Mastering knowledge about language

Students will:

- master the most basic grammatical concepts
- understand a specific vocabulary set according to simplified texts
- recognise the connections between grammar in their own language and grammar in a classical language.

3. Applying knowledge about language

Students will:

- apply the most basic grammatical concepts

⁷ Classical languages appear in school curricula no earlier than the Second cycle, and the expectations of student achievement duly reflect a delayed onset of instruction. Expectations of achievement reflect the minimum requirements that students must fulfil during the average number of hours of classical language instruction provided, starting with the initial Second cycle and continuing in a graduated fashion until the end of the Fourth cycle.

- compose short, simple sentences, and complete and connect parts of a given incomplete text
- use textbook glossaries and vocabulary lists.

II. UNDERSTANDING, TRANSLATING AND INTERPRETING TEXTS

1. Preparing to read, analyse, and understand texts

Students will:

- read with comprehension and determine the most basic functions of the words in simple sentences
- with teacher assistance, understand the substance of and know how to extract the significant information from simple sentences and simplified texts
- identify cultural connotations in simple sentences and simplified texts.

2. Preparing to translate

Students will:

- translate simple sentences, phrases, or proverbs, as well as simplified texts, using a foreign language dictionary
- recognise the most basic strategies of collaborative and individual learning
- demonstrate curiosity and a positive attitude towards text translation and comprehension.

3. Preparing to more deeply analyse and understand texts and text excerpts

Students will:

- with teacher assistance, recognise related parts of texts as well as the message and purpose of simplified texts
- translate simpler sayings and proverbs, and explain their meanings
- draw connections between simplified texts and their cultural contexts.

III. INTERCULTURAL ACTIVITY

1. Researching culture and heritage

Students will:

- read short mythological stories and culturally-oriented pieces from their textbooks and other sources, including electronic media
- show interest in researching culture and heritage
- think about the commonalities between past civilisations and modern society.

2. Applying knowledge of culture and heritage

Students will:

- cite and retell mythological stories, and recite basic information about history and civilisation
- quote and use simpler proverbs in concrete situations
- prepare simple presentations having to do with culture and civilisation, using various resources, including electronic media.

3. Comparing and understanding knowledge of culture and heritage

Students will:

- recognise the importance of observing their own and other cultures
- actively compare and contrast their own culture with that of a classical language
- recognise universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

The third cycle⁸

I. READING AND WRITING

1. Understanding rules for reading and writing

Students will:

- master the characteristics of pronunciation and spelling in a classical language
- acquire a positive attitude towards reading and writing in a classical language, and overcome foreign language anxiety
- read a simple original text.

2. Mastering knowledge about language

Students will:

- master basic grammatical concepts
- understand a specific vocabulary set according to simple original texts
- recognise the connections between grammar in their own language and grammar in a classical language.

3. Applying knowledge about language

Students will:

- apply basic grammatical concepts
- compose short, complex sentences, and complete and connect parts of a given incomplete text
- use a foreign language dictionary.

II. UNDERSTANDING, TRANSLATION AND INTERPRETATION OF TEXTS

1. Preparing to read, analyse, and understand texts

Students will:

- read with comprehension and determine the functions of the words in sentences
- understand the substance of and know how to extract the significant information from simple sentences and original texts
- identify cultural connotations in simple sentences and original texts.

2. Preparing to translate

Students will:

- translate sentences, phrases, or proverbs, as well as simple original texts, using a foreign language dictionary
- acquire basic strategies of collaborative and individual learning
- demonstrate curiosity and a positive attitude towards text translation and comprehension.

3. Preparing to more deeply analyse and understand texts and text excerpts

Students will:

- recognise related parts of texts as well as the message and purpose of simple original texts
- translate simpler sayings and proverbs, and explain their meanings
- draw connections between simple original texts and their cultural, literary, and historical contexts.

⁸ With respect to a second classical language, the instruction of which may begin no earlier than the Third cycle, expectations of achievement will be determined by subject curricula; Second cycle expectations may be used for orientational reference.

III. INTERCULTURAL ACTIVITY

1. Researching culture and heritage

Students will:

- read mythological stories and cultural, literary, and historical texts from various sources, including electronic media
- show interest in exploring culture and heritage
- think about the commonalities between past civilisations and modern society.

2. Application of knowledge about culture and heritage

Students will:

- cite and retell mythological stories, and recite information about history, literature, and civilisation
- quote and use proverbs in concrete situations, and know how to place them in a literary and historical context
- prepare presentations having to do with literature, history and civilisation, using various resources, including electronic media.

3. Comparing and understanding knowledge of culture and heritage

Students will:

- recognise the importance of observing their own culture and other cultures
- actively compare and contrast their own culture with that of a classical language
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

The fourth cycle (vocational schools)⁹

I. READING AND WRITING

1. Understanding rules for reading and writing

Students will:

- master the characteristics of pronunciation and spelling in a classical language
- acquire a positive attitude towards reading and writing in a classical language, and overcome foreign language anxiety
- appreciate the importance of accuracy when reading and writing professional terminology, and read a very simple original text.

2. Mastering knowledge about language

Students will:

- master basic grammatical concepts
- understand a specific set of professional terminology, in simplified original texts
- recognise the connections between grammar in their own language and grammar in a classical language.

3. Applying knowledge about language

Students will:

- apply basic grammatical concepts
- compose short, complex sentences, and complete and connect parts of a given incomplete text
- use a foreign language dictionary.

⁹ Distinct expectations of student achievement will depend on the duration and number of hours of instruction, and will be determined by subject curricula; additional details of individual vocational programmes will meanwhile be determined by school curricula.

II. UNDERSTANDING, TRANSLATION AND INTERPRETATION OF TEXTS

1. Preparing to read, analyse, and understand texts

Students will:

- read with comprehension and determine the basic functions of the words in sentences
- understand the substance of and know how to extract the significant information from professional terms, sentences, and simple original texts
- identify cultural connotations in sentences and simple original texts.

2. Preparing to translate

Students will:

- translate sentences, professional phrases or proverbs, as well as simplified original texts, using a foreign language dictionary
- acquire basic strategies of collaborative and individual learning
- acquire curiosity and a positive attitude towards text translation and comprehension.

3. Preparing to more deeply analyse and understand texts and text excerpts

Students will:

- recognise related parts of texts as well as the message and purpose of simple original texts
- translate simpler sayings and proverbs, as well as professional terms, and explain their meanings
- draw connections between simple original texts and their cultural and historical contexts.

III. INTERCULTURAL ACTIVITY

1. Researching culture and heritage

Students will:

- read mythological stories and cultural, literary, and historical texts from various sources, including electronic media
- acquire an interest in researching culture and heritage
- think about the commonalities between past civilisations and modern society.

2. Applying knowledge of culture and heritage

Students will:

- cite and retell mythological stories, and recite information about history, literature, and civilisation
- quote and use proverbs in concrete situations, and know how to place them in a literary and historical context
- prepare presentations having to do with literature, history and civilisation, using various resources, including electronic media.

3. Comparing and understanding knowledge about culture and heritage

Students will:

- recognise the importance of observing their own culture and other cultures
- actively compare and contrast their own culture with that of the target classical language
- acquire universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

I. READING AND WRITING

1. Understanding rules for reading and writing

Students will:

- properly use the pronunciation and spelling rules of a classical language
- acquire a positive attitude towards reading and writing
- read simple and complex original texts in a classical language.

2. Mastering knowledge about a language

Students will:

- master basic, complex, and specialized grammatical concepts
- understand and know a specific vocabulary set according to simple and more complex original texts
- recognise the connections between grammar in their own language, in other foreign languages that they learn, and in a classical language.

3. Applying knowledge about a language

Students will:

- apply basic, complex, and specialized grammatical concepts
- compose all types of sentences and structures, and complete and connect parts of a given incomplete original text
- use a multi-language dictionary and compare the etymology of words rooted in classical languages.

II. UNDERSTANDING, TRANSLATION AND INTERPRETATION OF TEXTS

1. Preparing to read, analyse, and understand texts

Students will:

- read with comprehension, determine the functions of words in sentences, and know how to morphologically and syntactically analyse sentences
- understand the substance of and know how to extract the significant information from sentences as well as simpler and more complex original texts
- identify cultural connotations in sentences as well as in simpler and more complex original texts.

2. Preparing a translation

Students will:

- translate sentences, phrases, proverbs, and simpler and more complex original texts from a classical language to their own, and vice versa
- acquire and apply collaborative and individual learning strategies
- acquire interest in understanding texts, and curiosity and creativity in preparing translations from a classical language to their own, and vice versa.

¹⁰ In determining expectations of achievement for students learning a classical language in non-classical grammar schools, the expectations listed here should be adjusted to reflect the lower number of years and hours of instruction. Distinct expectations of achievement will be determined by subject curricula, and additional details will be determined in specific grammar school curricula, taking into consideration the profile of each school.

3. Preparing to more deeply analyse and understand texts and text excerpts

Students will:

- recognise related parts of texts as well as the message and purpose of simpler and complex original texts, and apply, connect, or classify this information in a civilisation, literary, historical, and philosophical context
- translate sayings and proverbs, and explain their meanings
- draw connections between simpler as well as more complex original texts and their cultural, literary, and historical contexts, and compare and contrast everyday situations with the literary and historical examples from original, classical language texts.

III. INTERCULTURAL ACTIVITY

1. Researching culture and heritage

Students will:

- read mythological stories and cultural, literary, historical, and philosophical texts from various sources, including electronic media
- explore culture and heritage, and draw connections between their own culture and that of a classical language
- deduce their own conclusions and organise presentations on the commonalities between past civilisations and modern society.

2. Applying knowledge of culture and heritage

Students will:

- cite, retell, and practically use mythological stories, and recite information about history, literature, philosophy, and civilisation
- quote and use proverbs in concrete situations, and know how to place them in a cultural, literary, historical, and philosophical context
- prepare presentations having to do with literature, history, civilisation, and philosophy, using various resources, including electronic media.

3. Comparing and understanding knowledge of culture and heritage

Students will:

- recognise and promote the importance of observing their own culture and other cultures
- recognise and know how to compare and contrast their own culture with that of a classical language, and present their findings
- acquire and apply universal human values such as friendship, collaboration, altruism, and tolerance, and recognise the importance of active community involvement.

D. LANGUAGES OF NATIONAL MINORITIES AS MOTHER TONGUES

The subject of languages of national minorities as mother tongues will be elaborated upon, according to the same methodology as are foreign languages, in subject curricula.

SUBJECT FRAMEWORK OF THE AREA: The Croatian Language, The Croatian Language as a Foreign Language, [the respective mother tongue for national minorities], [the first foreign language], [the second foreign language], [the third foreign language], The Latin Language, The Ancient Greek Language

2. Mathematics Area

DESCRIPTION OF THE AREA

In a society reliant on information and technology it is necessary to critically revisit complex topics, interpret available information, analyse and adapt to new situations, make informed decisions in everyday life, solve various problems, apply technology efficiently, and exchange ideas and opinions.

Given that mathematics systematically studies quantitative relations, structure, forms, space, patterns, and regularities; analyses random phenomena; observes and describes changes in various contexts; and provides a precise symbolical language for describing, presenting, analysing, re-examining, interpreting, and advocating ideas, mathematics education enables students to acquire knowledge, skills, abilities, manners of thinking, and attitudes necessary for successful and useful participation in such a society.

Teaching and learning mathematics requires the transmission of knowledge, skills and abilities in computing, assessment, and logical and spatial thinking. A mathematical approach to problems includes selecting and correctly applying basic mathematical skills, discovering patterns in forms and numbers, preparing models, interpreting data, and recognising and exchanging ideas. Solving mathematical problems requires a creative and systematic approach, which not coincidentally is also the main requirement for invention (innovation) and scientific and technical discovery.

Mathematical education enables students to set up and solve mathematical problems, encouraging them to be systematic, creative, adventurous, distinctive, persistent, and research-savvy. All students can and should experience success in mathematics. By learning mathematics, they will acquire self-confidence in the use of numbers, and they will develop measurement and construction skills as well as the ability to create three-dimensional images. They will learn how to collect, organise, and interpret data; make presentations using mathematical language; reason inductively based on observed patterns and connections; and think in abstract terms. They will become active participants in the process of learning and thus well-prepared for lifelong learning.

Over the course of mathematical education, students will realise the importance of mathematics in their daily lives, gain insight into the historical development of the discipline, and come to understand its role and importance in the society of the past, present, and future. They will connect new mathematical concepts, expressions, skills, and processes to those with which they have previous experience and practical knowledge. They will gain exposure to mathematical problems found in real, everyday situations, thus linking the discipline with their everyday lives and activities as well as with other areas of their education. They will have an opportunity to apply mathematics in the application and expansion of their own knowledge, skills and abilities. They will engage in corresponding mathematical activities both individually and in groups (in a collaborative manner), which will enable them to approach problems with mathematical ramifications in a variety of contexts.

EDUCATIONAL GOALS OF THE AREA

Students will:

- acquire basic mathematical knowledge, skills, and abilities, and establish and understand mathematical relationships
- learn to solve mathematical problems and apply principles of mathematics in various contexts, including professional life
- develop a positive attitude towards mathematics, responsibility for their own mathematical success and progress, and appreciation for their mathematical achievements
- recognise and understand the historical and societal role of mathematics in science, culture, art, and technology, as well as its potential for contributing to society in the future
- learn skills of abstract and spatial thinking, and of logical deduction
- concisely present mathematical knowledge, ideas and results
- use technology efficiently
- acquire a sound basis for lifelong learning and continuing education.

EXPECTATIONS OF STUDENT ACHIEVEMENT PER EDUCATION CYCLES

The first cycle

I. MATHEMATICS PROCESSES

1. Presentation and communication

Students will:

- describe mathematical forms, ideas, procedures, and solutions, and present them using figures, drawings, charts, numbers, and other media and/or materials
- prepare and deliver situationally appropriate presentations, and connect and switch between various related presentations
- independently interpret word problems
- express ideas and results using age-appropriate spoken and mathematical language, in oral, written and graphic formats
- listen to and exchange mathematical ideas and explanations, and solve problems in a collaborative manner.

2. Mathematical connections

Students will:

- establish connections between their own mathematical ideas, concepts, presentations, and procedures
- connect mathematics with their own experiences, everyday lives, and other educational areas
- compare, group, and classify objects and phenomena according to specific criteria in simple concrete situations.

3. Logical thinking, argumentation, and deduction

Students will:

- ask typical mathematical questions (e.g., How many ... are there? What is known? What do we need to determine? How shall we determine...? Why? Does the solution make sense? Are there multiple solutions?) and consider/make assumptions about mathematical objects, patterns, and relationships
- explain their selection of mathematical procedures and understand the significance of their results
- draw conclusions in a limited number of steps through inductive and deductive reasoning.

4. Problem solving and mathematical modelling

Students will:

- set up and analyse simpler problems, plan to solve them using appropriate mathematical concepts and procedures, solve them, and interpret and evaluate both their procedures and their solutions
- apply mathematical concepts and procedures in various contexts
- build new mathematical knowledge by solving problems.

5. Applying technology

Students will:

- learn to use pocket calculators and appropriate educational computer programmes.

II. MATHEMATICAL CONCEPTS

1. Numbers

Students will:

- count in patterns of predetermined intervals; read, write, and compare natural numbers (including zero); and point out natural numbers on the numeric line
- read and write ordinal numbers and Roman numerals

- use the decimal numeral system (i.e., base 10)
- calculate in their heads (add, subtract, multiply, and divide, with knowledge of addition tables up to 10+10 and multiplication tables up to 10x10) and on paper, applying complementary mathematical operations when necessary
- round numbers
- solve for variables in simple equations and verify the accuracy of their solutions
- apply mathematics to simple everyday situations.

2. Algebra and functions

Algebra and functions are not included in this cycle.

3. Form and space

Students will:

- describe their positions and trajectories by using their own senses of orientation and a simple coordinate system (e.g., a square grid)
- identify, draw, describe, compare, and classify lines, faces, and simple two- and three-dimensional forms and their parts
- sketch simple two-dimensional forms and draw them using geometry tools
- recognise and present simple two- and three-dimensional forms in various positions
- experiment with the construction and deconstruction of two- and three-dimensional forms using real materials
- recognise primary geometric forms in their everyday lives.

4. Measuring

Students will:

- compare and assess length, volume, mass, time, and temperature, and measure them using appropriate measuring devices
- know the names for standardized units of measure for length, surface, volume (litres), mass, time, and temperature, and use them in their everyday lives
- perform money calculations (in kuna and lipa) in their everyday lives
- calculate the perimeter of simple shapes (e.g., triangles, rectangles, squares) and the area of rectangles and squares
- approximate or measure the area of simple figures by counting graph paper squares
- determine the measurable features of simple objects or phenomena in everyday situations, and apply measurement skills to solve everyday problems.

5. Data

Students will:

- collect, classify, and organise data culled from their everyday lives, and present them using simple tables, pictograms (i.e., graphic charts), and bar charts
- read and interpret data presented in simple tables, pictograms, and bar charts
- quantify various outcomes of simple situations using real materials and charts
- apply basic probability terminology (e.g., outcome, possible, impossible, certain, coincidental, probable, fair game, unfair game)
- compare the probability of outcomes (less probable, equally probable, more probable).

6. Infinitesimal calculus

Infinitesimal calculus is not included in this cycle.

The second cycle

I. MATHEMATICAL PROCESSES

1. Presentation and communication

Students will:

- present mathematical forms, ideas, procedures, and solutions using words, figures, drawings, charts, graphs, tables, numbers, symbols, and other media and/or materials
- prepare and deliver situationally appropriate presentations, and connect and switch between various related presentations
- independently use compulsory mathematical literature
- express ideas and results using age-appropriate spoken and mathematical language, in oral, written and graphic formats
- listen to and exchange mathematical ideas and explanations, and work in groups in a collaborative manner.

2. Mathematical connections

Students will:

- establish connections between mathematical objects, ideas, concepts, presentations, and procedures, and form new mathematical units by connecting them
- connect mathematics with their own experiences and everyday lives, and with other educational areas
- compare, group, and classify objects and phenomena according to specific criteria.

3. Logical thinking, argumentation, and deduction

Students will:

- ask typical mathematical questions (e.g., Is there ...? How many ... are there? What is known? What do we need to determine? How shall we determine ...? Why? Does the solution make sense? Are there multiple solutions?) and consider/make assumptions about mathematical objects, patterns, and relationships
- explain their selection of mathematical procedures and explain the significance of their results
- draw conclusions in a limited number of steps through inductive and deductive reasoning.

4. Problem solving and mathematical modelling

Students will:

- set up and analyse simpler problems, plan to solve them using appropriate mathematical concepts and procedures, solve them, and interpret and evaluate both their procedures and their solutions
- apply mathematical concepts and procedures in various contexts
- build new mathematical knowledge by solving problems.

5. Applying technology

Students will:

- use pocket calculators and appropriate educational computer programmes
- use technology to draw, collect, organise, and present data and information, and in situations that focus on mathematical ideas (in order to be relieved from manual calculation).

II. MATHEMATICAL CONCEPTS

1. Numbers

Students will:

- compare, add, subtract, multiply, and divide natural numbers with certainty and efficiency, applying basic techniques and complementary mathematical operations

- understand the basic properties of natural numbers, apply the rules of divisibility, and break down natural numbers into prime factors
- read, write, and compare whole numbers, fractions, decimals, and percentages, and present them using common notations
- add, subtract, multiply, and divide (in their heads, on paper, and with the assistance of pocket calculators) rational numbers written in the form of fractions and decimals, and apply basic techniques and complementary mathematical operations
- round decimals to a specific number of places
- use positive rational numbers, whole numbers, and mathematical operations in simple everyday situations.

2. Algebra and functions

Students will:

- point out whole numbers and simpler rational numbers, written as fractions or decimals, on a numeric line of appropriate unit length
- notice patterns with respect to numbers and their notations, as well as to mathematical operations
- solve for variables in simple mathematical formulas and expressions
- solve simple linear equations and, using substitution, check the accuracy of their solutions
- solve simple word problems using algebraic symbols (numerical sentences, formulas, linear equations)
- recognise proportional quantities and apply ratios and proportionality in simple everyday situations.

3. Form and space

Students will:

- use geographical maps and a simple two-dimensional coordinate system to determine the distance between two points on the numeric line
- recognise, identify by name, create, compare, and classify two- and three-dimensional geometric forms, and recognise and describe their geometrical properties
- sketch/draw simple two-dimensional forms, and reproduce them using geometrical tool sets and a simple computer drawing programme
- recognise, draw, and construct axisymmetric and centrally symmetrical two-dimensional figures, including congruous triangles
- explore and anticipate the outcomes of assembling and disassembling complex two- and three-dimensional forms using real materials
- using three-dimensional models as well as square and triangular grids, sketch three-dimensional forms composed of cubes and their top views, front views, and side views
- recognise geometric forms, congruity, and symmetry in the world around them.

4. Measuring

Students will:

- compare, assess, and measure length, volume, mass, time, temperature, and angle
- convert standardized units of measure for length, surface, volume, mass, time, temperature, and angle, and apply conversion skills in their everyday lives
- perform money calculations in everyday situations
- determine the distance between two points on, as well as the surface area and volume of, simple three-dimensional objects by counting unit lengths, squares, and cubes, and by pouring liquid from one vessel to another
- indirectly measure length using proportionality (i.e., map scale)

- apply formulas to determine the perimeter and area, as well as the sum of internal angles, of a triangle and rectangle, and to determine the volume of cubes and parallelepipeds
- determine the measurable features of objects or phenomena in everyday situations, and apply measurement techniques to problem solving.

5. Data

Students will:

- collect, classify, and organise data, and present them using tables, frequency diagrams, pictograms, bar charts, pie charts, and systemic lists
- read and interpret data presented in tables, pictures, lists, and in various graphs and charts
- determine the arithmetic mean, range, and median of a series of numerical data
- determine the number of possible and, for a given event, favourable outcomes in simple situations
- apply the terminology of probability (e.g., outcome, event, opposite event, possible, impossible, certain, coincidental, random, probable, chance, probability)
- assess and calculate the probability of an outcome in simple situations, and present it in the form of a fraction, decimal, and percentage.

6. Infinitesimal calculus

Infinitesimal calculus is not included in this cycle.

The third cycle

I. MATHEMATICAL PROCESSES

1. Presentation and communication

Students will:

- present mathematical forms, ideas, procedures, and solutions in an organised manner, using words, pictures, drawings, models, charts, graphs, lists, tables, numbers, and symbols
- prepare and deliver situationally and purposefully appropriate presentations, and connect and switch between various related presentations
- collect and interpret mathematical information from a variety of sources
- express ideas, results, and knowledge using clear spoken and mathematical language, in oral, written and graphic formats
- work in groups, exchanging and debating their ideas, opinions, and attitudes.

2. Mathematical connections

Students will:

- establish and understand connections and relationships between mathematical objects, ideas, concepts, presentations, and procedures, and form new mathematical units by connecting them
- connect mathematics with their own experiences and everyday lives at home, in the community, and in other educational areas
- compare, group, and classify objects and phenomena according to defined or selected criteria.

3. Logical thinking, argumentation, and deduction

Students will:

- ask typical mathematical questions (e.g., Is there ...? If there is, how many? How shall we find them? Why?) and consider/make assumptions based on them
- explain their selection of mathematical procedures and explain the significance of their results
- follow and create shorter chains of mathematical arguments, draw conclusions through inductive and deductive reasoning, and apply techniques of analogy, generalisation, and specialisation in simple situations.

4. Problem solving and mathematical modelling

Students will:

- set up and analyse simpler problems, plan to solve them using appropriate mathematical concepts and procedures, solve them, and interpret and evaluate both their procedures and their solutions
- apply mathematical concepts and procedures in various contexts
- build new mathematical knowledge by solving problems and modelling situations.

5. Applying technology

Students will:

- explore, analyse, and experiment with mathematical ideas, and verify their assumptions using pocket calculators and a variety of computer programmes - in particular, dynamic geometry and spreadsheet creation programmes
- use technology to practically and efficiently collect, organise, illustrate, present, and exchange data and information, both for modelling and solving problems and also for use in situations with a focus on mathematical ideas (in order to relieve the manual calculation burden, and for visual presentation)
- understand the advantages and disadvantages of using technology.

II. MATHEMATICAL CONCEPTS

1. Numbers

Students will:

- compare, round, add, subtract, multiply, divide, square, and extract roots of real numbers, written as decimals and fractions, with certainty and efficiency
- convert fractions into decimals with a given level of preciseness
- understand and perform calculations using scientific notation
- select the appropriate method of calculation (in their heads, on paper, and using a pocket calculator)
- assess the significance and accuracy of their calculation results
- use real numbers as well as their notations and mathematical operations to solve simple mathematical problems and problems in their everyday lives.

2. Algebra and functions

Students will:

- apply percentages and percentage calculations in concrete situations
- substitute variables with numerical values in a formula, and calculate the value of the remaining variable[s]
- recognise and apply proportionality and reverse proportionality in simple situations
- present simple numerical relationships (e.g., linear, pure quadratic, square root) using mutually interchangeable words, associated values tables, equations, and graphics
- solve linear equations, and simple two-variable systems of two linear equations, and use substitution to verify the accuracy of their solutions
- convert a simple problem into algebraic notation (e.g., numerical sentences, linear equations, systems of two linear equations), plan and execute its solution, and understand the significance of their solutions.

3. Form and space

Students will:

- draw, using a two-dimensional rectangular coordinate system, a point defined by coordinates and a straight line defined by equation; students will also read point coordinates

- recognise, identify by name, build, and classify two- and three-dimensional geometric forms, and identify and precisely describe their geometrical properties
- understand basic relationships and patterns in two- and three-dimensional geometric forms, including congruence and similarity in triangles
- sketch two-dimensional forms, and reproduce and/or build the simplest of them using geometrical tools and dynamic geometry computer programmes
- sketch and draw top views, front views, side views, and three-dimensional grids, and create three-dimensional forms on the basis of their two-dimensional representations
- axisymmetrically and centrally symmetrically copy and rotate simple figures; enlarge and diminish a simple figure in a pre-defined ratio using geometric tools and a dynamic geometry computer programme
- recognise congruence, similarity, and symmetry in two- and three-dimensional forms, in their everyday surroundings, and in art, and use them when analysing and describing the world around them.

4. Measuring

Students will:

- compare, assess, and measure length, volume, mass, time, temperature, and angle, and calculate area and average velocity
- convert standard units of measure for length, surface, volume, mass, time, temperature, angle, and average velocity, and apply these conversion techniques in their everyday lives
- indirectly measure length by applying proportionality and similarity
- apply the Pythagorean Theorem and other basic formulas related to the measurable features of simple shapes and figures
- determine the measurable features of objects or phenomena in everyday situations, select appropriate measuring units and devices, and apply measurement techniques in problem solving.

5. Data

Students will:

- collect, classify, and organise data, and present them both with and without a computer, using systemic lists, tables, frequency diagrams, line charts, bar charts, pie charts, „box and whiskers" charts, and various graphs
- read, interpret, and analyse data presented in various ways
- determine frequency and relative frequency for given data sets, as well as the arithmetic mean, median, quartiles, mode, range, and interquartile range of a series of numeric data
- efficiently determine by argument the number and probability of possible and favourable outcomes in simple situations
- assess the probability of particular random events, explaining them as relative frequencies.

6. Infinitesimal calculus

Infinitesimal calculus is not included in this cycle.

The fourth cycle (vocational schools)

I. MATHEMATICAL PROCESSES

1. Presentation and communication

Students will:

- present mathematical forms, ideas, procedures, and solutions in an organised manner, using words, pictures, drawings, models, charts, graphs, lists, tables, numbers, and symbols
- prepare and deliver situationally and purposefully appropriate presentations, and connect and switch between various related presentations
- collect and interpret mathematical information from a variety of sources

- express ideas, results, and knowledge using clear spoken and mathematical language, in oral, written and graphic formats
- work in groups, exchanging and debating their ideas, opinions, and attitudes.

2. Mathematical connections

Students will:

- establish and understand connections and relationships between mathematical objects, ideas, concepts, presentations, and procedures, and form new mathematical units by connecting them
- connect mathematics with their own experiences and everyday lives at home, in the community, at work, and in other educational areas
- compare, group, and classify objects and phenomena according to defined or selected criteria.

3. Logical thinking, argumentation, and deduction

Students will:

- ask typical mathematical questions (e.g., Is there ...? If there is, how many? How shall we find them? Why?) and consider/make assumptions based on them
- explain their selection of mathematical procedures and explain the significance of their results
- follow and create shorter chains of mathematical arguments, draw conclusions through inductive and deductive reasoning, and apply techniques of analogy, generalisation, and specialisation in simple situations.

4. Problem solving and mathematical modelling

Students will:

- set up and analyse simpler problems, plan to solve them using appropriate mathematical concepts and procedures, solve them, and interpret and evaluate both their procedures and their solutions
- apply mathematical concepts and procedures in their everyday personal, professional, and social lives, and in other educational areas
- build new mathematical knowledge by solving problems and modelling situations.

5. Applying technology

Students will:

- explore, analyse, and experiment with mathematical ideas, and verify their assumptions using pocket calculators and a variety of computer programmes - in particular, dynamic geometry and spreadsheet creation programmes
- use technology to practically and efficiently collect, organise, illustrate, present, and exchange data and information, both for modelling and solving problems and also for use in situations with a focus on mathematical ideas (in order to relieve the burden of manual calculation, and for visual presentation)
- understand the advantages and disadvantages of using technology.

II. MATHEMATICAL CONCEPTS

1. Numbers

Students will:

- differentiate between natural, whole, rational, and real numbers, and use various notations (e.g., fractions, percentages, decimals, scientific notation)
- compare, add, subtract, multiply, and divide numbers; raise numbers exponentially and extract their roots, and assess and round the results of their calculations
- rationally select the appropriate method of calculation (in their heads, on paper, and using a pocket calculator) for practical use in concrete situations

- use numbers, proper notations, and mathematical operations to model simple applicable problems in their everyday lives.

2. Algebra and functions

Students will:

- apply percentages and percentage calculations in concrete situations
- substitute variables with numerical values in a formula, and calculate the value of the remaining variable[s]
- recognise and apply proportionality and reverse proportionality in simple situations
- describe and derive simple numerical relationships by using and performing mutual conversion between formulas, tables, graphs and words; recognise, compare, and interpret these relationships
- calculate solutions to linear equations, systems of two linear equations, and linear inequalities with the assistance of a computer, and present their work graphically
- recognise and interpret the typical properties of simple graphs (e.g., monotony, periodicity) and their noteworthy points (e.g., zero points, extremes, points important for a specific situation), and compare simple graphs
- apply concepts of linearity and exponentiality, and use linear equations, systems of two linear equations, and linear inequalities in modelling situations from their everyday lives.

3. Form and space

Students will:

- draw, using a two-dimensional rectangular coordinate system, a point defined by coordinates and a straight line defined by equation; students will also read point coordinates
- recognise, describe, compare, and apply properties and relationships of two- and three-dimensional geometric forms when drawing, measuring, calculating, and deducing
- sketch, describe, and interpret two-dimensional representations of three-dimensional forms
- describe and apply properties of geometric patterns
- use a geometric tool set and a simple computer programme for drawing, calculating, deducing, and solving practical problems
- recognise two- and three-dimensional forms in everyday surroundings and art, and solve practical problems with real objects, representing them with geometric figures and shapes.

4. Measuring

Students will:

- compare, assess, and measure length, volume, mass, time, temperature, and angle, and calculate area and average velocity
- convert standard measuring units for length, surface, volume, mass, time, temperature, angle, and average velocity, and apply these conversion techniques in their everyday lives
- apply proportionality and similarity when measuring
- apply the Pythagorean Theorem and other basic formulas related to the measurable features of shapes and figures
- determine the measurable features of objects or phenomena in everyday situations, select appropriate measuring units and devices, and apply measurement techniques in problem solving.

5. Data

Students will:

- collect, classify, and organise data, and present both with and without a computer, for purposes of statistical analysis
- read, interpret, and analyse data presented in various ways

- determine and use secondary values (e.g., arithmetic mean, median, mode) and dispersion (e.g., range, interquartile range) of a numerical data set
- use simple computer programmes for statistical data processing
- calculate the probability of an outcome in simple situations, and interpret it as a relative frequency.

6. Infinitesimal calculus

Infinitesimal calculus is not included in this cycle.

The fourth cycle (grammar schools)

I. MATHEMATICAL PROCESSES

1. Presentation and communication

Students will:

- present mathematical forms, ideas, procedures, and solutions in an organised manner, using words, pictures, drawings, models, charts, graphs, lists, tables, numbers, and symbols
- prepare and deliver situationally and purposefully appropriate presentations, and connect and switch between various related presentations
- collect and interpret mathematical information from a variety of sources
- express ideas, results, and knowledge using clear spoken and mathematical language, in oral, written and graphic formats
- work in groups, exchanging and debating ideas, opinions, and attitudes.

2. Mathematical connections

Students will:

- establish and understand connections and relationships between mathematical objects, ideas, concepts, presentations, and procedures, and form new mathematical units by connecting them
- connect mathematics with their own experiences and everyday lives at home, in the community, at work, and in other educational areas
- compare, group, and classify objects and phenomena according to defined or selected criteria.

3. Logical thinking, argumentation, and deduction

Students will:

- ask typical mathematical questions (e.g., Is there ...? If there is, how many? How shall we find them? Why?) and consider/make assumptions based on them
- explain their selection of mathematical procedures and explain the significance of their results
- follow, create and evaluate chains of mathematical argument of various types, and apply techniques of analogy, induction, and deduction
- recognise logical deductions and mathematical proofs as key aspects of mathematics
- think creatively, critically, and flexibly
- recognise the impact of human factors and their own beliefs on the process of deduction.

4. Problem solving and mathematical modelling

Students will:

- set up and analyse problems, plan to solve them using appropriate mathematical concepts and procedures, solve them, and interpret and evaluate both their procedures and their solutions
- model situations and processes from other educational areas, and from their everyday personal, professional, and social lives
- build new mathematical knowledge by solving problems and modelling situations.

5. Applying technology

Students will:

- explore, analyse, and experiment with mathematical ideas, and verify their assumptions using pocket calculators and a variety of computer programmes - in particular, dynamic geometry and spreadsheet creation programmes
- use a pocket calculator to make calculations, and use other technologies to practically and efficiently collect, organise, present, and exchange data and information, both for modelling and solving problems and also for use in situations with a focus on mathematical ideas (in order to relieve the burden of manual calculation, and for visual presentation)
- understand the advantages and disadvantages of using technology.

II. MATHEMATICAL CONCEPTS

1. Numbers

Students will:

- differentiate between natural, whole, rational, and real numbers, use various notations, and recognise and use the properties of and relationships between sets of numbers
- compare numbers and perform numeric calculations with and without the assistance of technology, and determine and assess their precise and rounded results
- use numbers, proper notations, and mathematical operations to model applicable problems in their everyday lives.

2. Algebra and functions

Students will:

- establish, express, and anticipate numeric patterns in strings that are defined by specific numbers, and analyse recursively-defined strings and those defined by general numbers/terms (in particular, arithmetical and geometric strings)
- substitute formula variables with numerical values, calculate the value of the remaining variable[s], and express all variable in terms of all others
- calculate with exponents, simple algebraic expressions, factorials, and binomial coefficients
- describe and derive simple numerical relationships by using and performing mutual conversion between formulas, tables, graphs, and words; recognise, compare, and interpret these relationships
- recognise, determine and interpret the characteristic elements and properties of simple functions; analyse linear, quadratic, exponential, logarithmic, and trigonometric functions; and use their properties
- solve linear, quadratic, exponential, and logarithmic equations, inequalities, and equation systems by calculating in the set of real numbers, both graphically and with the help of a computer
- apply functions and their graphs, equations, and inequalities when solving problems in mathematics, other educational areas, and their everyday lives.

3. Form and space

Students will:

- use coordinate notations of points, straight lines, and circles, and apply coordinate geometry when presenting and examining the properties of geometrical forms
- present, add, and multiply two-dimensional vectors, and use vectors and vector operations to present and examine the research properties of geometric forms
- recognise, describe, and apply the principles of geometric congruity and similarity
- sketch, describe, and interpret two-dimensional representations of three-dimensional forms
- use two-dimensional geometric transformations when describing geometric patterns and their properties

- recognise two- and three-dimensional forms and their properties in everyday situations and art, and use them to describe and analyse the world around them.

4. Measuring

Students will:

- convert standard measuring units for length, surface, volume, mass, time, temperature, angle, and velocity, and apply conversion techniques in their everyday lives
- determine the measurable features of objects and (geometrical) figures by applying primary formulas, proportionality, similarity, the Pythagorean Theorem, and trigonometric functions (e.g., sine, cosine), and use them to calculate length, angle, area and volume
- determine the measurable features of objects or phenomena in everyday situations, and apply measurement techniques to solve problems in mathematics, in other educational areas, and in their everyday lives.

5. Data

Students will:

- systematically collect, classify, and organise data, and present and analyse them using secondary values (e.g., arithmetic mean, median, mode) and dispersion (range, interquartile range, standard deviation)
- assess the parameter of mean value using defined reliability
- recognise the approximate linear relationship of two variables, determine its coefficients, and use it in modelling
- interpret complex events, express them through the use of set operations, and calculate their probabilities
- apply normal distribution.

6. Infinitesimal calculus

Students will:

- calculate the increments and average increments of grid differentiations and simple functions, as defined by a formula
- interpret the derivation of functions physically (i.e., velocity of change) and geometrically (i.e., coefficient of point-based tangents), and derive polynomials
- using derivations, examine polynomial flows and draw polynomial – primarily quadratic and cubic – charts
- calculate the indefinite integrals of polynomials
- geometrically interpret definite integrals, and calculate definite integrals of polynomials by using the Newton-Leibniz formula
- apply derivations and definite integrals in solving simple problems.

SUBJECT FRAMEWORK OF THE AREA: Mathematics, Descriptive geometry

3. Science Area

DESCRIPTION OF THE AREA

What is commonly referred to as "science" is based on the findings of the fundamental natural sciences of physics, chemistry, biology, geography, and geology. These fields develop by virtue of human curiosity and a drive to find the answers to questions about mankind's origins, development, and role/place in nature and space. Thus, science is a part of culture in each and every human community. It explores and describes nature, life, and death, on a scale ranging from atomic nuclei, up through systems commensurate with man, all the way to the most distant reaches of space.

Mankind observes continual changes in nature through direct and instrumental observation, while natural sciences explore the patterns, causes, and forces that govern those changes. Knowledge of the fundamental natural sciences directly contributes to technological progress and ensures sustainable development on Earth. The area of natural sciences gathers knowledge that has been gained and collected for centuries, and that is the foundation of all technology used by man today. Application of this knowledge is evident in medicine, transport, communications, the production of food and other goods, the generation and transmission of energy, research into and use of natural resources, the harmonisation of man's needs with the conservation of nature, the culture of living, information, art, and research into the formation of space. Knowledge collected in the natural sciences is the general property of all mankind, so natural sciences are characterised by democracy and internationality. By learning natural sciences, students develop a system of values that educates them in terms of equality and appropriate remuneration for their achievements.

In order to adapt to the rapid pace of scientific and technological development, cultivate responsible attitudes towards nature, health, and the environment, and contribute to sustainable development, students need to acquire basic scientific skills and literacy. By learning science, students develop logical, creative and critical opinions, which contribute to their mastery of situations that require knowledge and professionalism. Science studies equip students with basic knowledge of natural phenomena and systems: motion and forces in inhabited areas, electromagnetic and thermodynamic phenomena, relativistic motion and forces, relationships between matter and energy, interactions between basic particles, and the workings of space from the cosmological level to the quantum level. Students observe the importance of physicists' discoveries as the basis for devising and realising real, modern devices.

Students come to know the properties of substances that make up the living and non-living world as well as the processes in which those substances take part, and of materials obtained from nature through simple procedures as well as those produced through modern industry. Discoveries on the part of chemists and biologists, which are based on controlled mimicry of natural processes, lead to new technologies in the production of food and medicines, and contribute to the development of new medicines.

Students become familiar with the structures and functions of living systems. Starting from the cell as the basic unit of life, they unfold the molecular and sub-molecular bases of life, the mysteries of inheritance, and processes by which genetic codes materialise in some of the diverse forms of life. Students learn about the parts and benthic communities of the ecosystem, and about the adaptation of living beings to environmental conditions over the course of evolution.

Students become familiar with human geography and its features, acquire basic knowledge of natural phenomena and processes on Earth, and learn about the formation, appearance, and significance of ecological and geospatial systems. They learn that the ecological system is a result of the interdependence between man and nature, whereas the geospatial system is a result of human activities from one region to the next. They learn about the mutual relationships between natural elements and societal phenomena/processes, about geospatial orientation and presentation, and about understanding and evaluating ecological and geospatial systems data. They prepare for active and conscientious roles in society and develop responsible attitudes towards the environment and natural resources.

In terms of scientific problems and research, instruction focuses on appropriate (practical) laboratory work and on the natural environment (or the surrounding areas). It follows various methods and approaches, providing the basis for students' studies and lifelong learning. The scientific method entails reproducible experiments regarding natural phenomena, and therefore experiments are an indispensable part of science education. Science has two faces: empirical, which relies on observation and measurement, and rational, which relies on logical thought and mathematical deduction.

Science education is built into the curriculum by observing the following three principles:

Contemporary society requires the availability of science education to all, regardless of gender, age, cultural or ethnic affiliation, ability, aptitude, and motivation for learning. All students should have a chance to acquire scientific literacy at various levels, and they do so in various ways and on various levels. Therefore, physics, chemistry, biology, and geography syllabi should be provided, from basic levels up through advanced programmes.

Learning about natural sciences is responsibility of the students, which means that it requires physical and mental effort on students' part. Students observe and describe phenomena, ask questions, acquire knowledge, devise explanations, and communicate their own ideas to others. Students are involved in planning, making assumptions, conducting experiments, measuring, data processing, problem solving, deduction, discussion, and critical deliberation.

Science education fosters a worldview that reflects the intellectual and cultural traditions of science. Students become familiar with scientific approaches, manners of research, the rules of evidence, and manners of formulating questions and providing explanations. In addition to imparting scientific knowledge and skills and enabling the development of scientific abilities, instruction in the natural sciences builds students' affinity and kinship with environment.

EDUCATIONAL GOALS OF THE AREA

The main goal of science education is to establish a scientifically literate society. An individual is scientifically literate if he or she understands and embraces the need for lifelong education; adopts scientific concepts, methods, procedures, and principles in decision-making; and directs knowledge and skills that have been acquired through education towards creative problem solving. This goal is implemented gradually, at specific levels of education, in a manner that is consistent with each student's age.

By adopting the objectives of the area, students will:

- acquire knowledge about significant phenomena and processes in nature
- acquire basic scientific literacy, including familiarity with scientific language, and understand significant concepts of general knowledge about nature as well as the role of that knowledge in the development of engineering/technology, which has contributed to improved standards of living
- recognise the importance of achievements in the natural sciences, in the historical context of the development of civilisation
- know how to find reliable information/data from various sources, and recognise the importance of reliable information/data in the acquisition of knowledge
- understand the importance of experiments, both in the laboratory and in outdoor/natural environments, and the necessity of field instruction, in addition to the development of outdoor orientational skills, the mastery of measuring instruments, and the ability to describe and carefully conduct simple experiments
- note the variables when studying a given natural phenomenon, and explore the interdependence of these variables
- learn how to discuss experiments; how to analyse, evaluate, and interpret the collected data; how to present the results of observation; and how to measure using a charts, tables, mathematical expressions, and thematic maps
- develop cartographic literacy, and use information technology when collecting, processing, and presenting data
- describe natural phenomena by using basic natural science concepts, and use models when explaining natural phenomena
- recognise and evaluate the limitations of applied methods, skills, models, and theories
- know how to ask questions and seek answers, independently solve problems, and collaborate in team settings
- acquire the knowledge necessary for the conservation of nature, develop a responsible attitude towards the use of natural resources, and support sustainable development that respects the natural balance and biodiversity
- learn the international system of physical units, and their corresponding units of measure

- place scientific achievements into a historical framework
- identify fundamental forces and motion in nature; the sources, transformations, and transmission of energy; electromagnetic and wave phenomena; and become familiar with the structure of atoms and atomic nuclei
- become familiar with properties and structures of substances, and of changes of substances in chemical processes
- become familiar with life cycles of living beings, their evolutionary development, and their body structure; the functions of organs; the structure of a living cell; the importance and hereditary role of genes
- develop the ability to interpret natural and geographical phenomena and processes on Earth, at the local and global level.

EXPECTED STUDENT ACHIEVEMENTS PER EDUCATIONAL CYCLE

The first cycle

I. NATURE AND MANKIND

1. History of science and development of civilisation

Students will:

- describe their relationship with nature
- specify examples of the impact of some major discoveries on people's everyday life
- describe how the interpretation of natural phenomena has changed in the course of the development of mankind

2. Research and communication

Students will:

- conduct a simple experiment by using simple measuring instruments
- ask questions about natural phenomena and natural processes and collect information from various sources
- observe and describe (by words and drawing) the key features of an observed object, phenomenon or process
- discuss possible results of conducted experiments and formulate the conclusion
- present results of a simple experiment in a drawing
- make simple models.

3. Sustainable development

Students will:

- express respect for nature, living creatures, other people and themselves
- name some of the most famous protected areas in Croatia, on land and on the sea
- express compassion for people who suffer and other endangered creatures
- describe the significance of water for humans
- specify an example of a renewable energy source.

II. The planet Earth

1. Spatial orientation

Students will:

- find their way around their immediate surroundings (home, school, town or village)
- learn spatial orientation using landmarks
- learn spatial orientation based on cardinal directions (north, south, east, and west)
- learn orientation based on a plan or sketch of a town or village.

2. The Earth in the solar system

Students will:

- on the basis of observation and recording describe the movement of the Sun in the course of time (day, years).

3. Natural environment of the Earth (relief, climate, water, soil, flora and fauna)

Students will:

- recognise and describe elements of the natural environment of their own town or village and region (relief, climate, water, soil, flora and fauna)
- differentiate between types of landscape in Croatia.

4. Natural resources

Students will:

- recognise and enumerate natural resources
- describe nature and impacts of changes on the natural systems on the Earth.

5. Presentation of phenomena and spatial processes

Students will:

- make a simple drawing or a model.

III. MATERIALS AND THEIR PROPERTIES

1. Types and sources

Students will:

- differentiate between natural materials, derived from the living and the non-living world, and artificial materials
- specify materials used in some everyday objects.

2. Structure and properties

Students will:

- specify and describe physical states of water
- describe circulation of water in nature
- describe air properties.

3. Recognising material properties and handling materials

Students will:

- measure the volume, mass, temperature, and time
- identify and learn to avoid risky situations involving hazardous, flammable, explosive, and poisonous materials.

4. Chemical changes and reactivity

Students will:

- specify examples of chemical changes (souring of milk and cabbage, burning of a candle, changes occurring when boiling an egg)
- describe changes in burning (e.g. of a candle)
- describe changes when boiling an egg
- specify examples of pollution that affect the composition of air, water, and soil.

IV. LIFE

1. Biodiversity

Students will:

- describe examples of biodiversity in the surrounding natural environment
- discuss why diversity is nature's greatest asset
- name typical plant and animal species from the surrounding natural environment
- describe some common properties of living beings
- on the basis of observation, describe the changes of seasons and link them with the changes in the life of living creatures in their surrounding natural environment
- differentiate between cultivated and wild plants, and between domestic and wild animals.

2. Mankind and health

Students will:

- specify the main body parts and describe their primary functions
- compare mankind to other species
- discuss and describe how one can preserve health by adhering to basic hygienic, dietary and physical habits.

3. Life processes

Students will:

- specify and describe several common properties of living beings and explain those properties on the example of people
- differentiate between the living and the non-living world
- specify and describe the main parts of plants and describe dependence of plants on environmental conditions
- describe diets of plants and animals.

4. Heredity and evolution

Students will:

- compare similarities and differences among organisms with respect to their classification
- name some of the main classes of living beings.

5. Ecosystems

Students will:

- explain the significance of harmony between people and nature
- specify the main ecological factors
- explain on examples how changes of ecological factors related to seasonal changes affect living beings
- describe basic benthic communities, changes in them, and protective measures
- use the knowledge of environmentally friendly waste management.

V. MOTION AND FORCE

1. Motion

Students will:

- describe the change of the position of an object in correlation with time and apply it to other simple examples of time phenomena in nature
- assess, measure, express in numbers and measuring units the duration of an event or a natural process.

2. Forces and fields

Students will:

- describe on simple examples how one object affects another
- describe the effect of a permanent magnet on objects made of different materials and interaction between two magnets.

3. Electrodynamics

Students will:

- describe electricity on the example of its household application (lighting and household appliances), and specify ways to avoid electric shock hazard.

4. Oscillation, waves, sound

Students will:

- specify examples of oscillation and wave motion in nature
- describe various sources of sound.

VI. ENERGY

1. Work and energy

Students will:

- describe the significance of the Sun for life on Earth
- discuss thermal and light radiation of the Sun
- describe the need to protect themselves from the Sun
- describe the changes in the states of water caused by its heating and cooling.

2. Electromagnetic waves and light

Students will:

- explain the occurrence of day and night, and the light and shadow.

3. Atoms, atomic nucleus, elementary particles

Students will:

- on the basis of experience, describe the division of the body into smaller and smaller elements.

4. Evolution of space

Students will:

- draw visible objects in the sky: the Sun, the Moon and the stars
- on the basis of observation, describe the main features of stars
- on the basis of observation, in the course of four weeks, describe changes in the appearance of the Moon.

The second cycle

I. NATURE AND MANKIND

1. History of science and development of civilisation

Students will:

- on specific examples analyse the relationship between mankind and nature
- compare the level of development of civilisation through historical periods
- observe natural phenomena and compare how they were interpreted in different historical periods.

2. Research and communication

Students will:

- observe, identify and take note of the key features of an observed object, phenomenon or process
- recognise possible hazards and apply corresponding protective measures
- describe conducted observation or experiment
- present experiment results in a drawing, table or simple chart
- on the basis of the observation of the immediate reality or after conducting a simple experiment, make a clear and well-formed conclusion regarding an object, phenomenon or process.

3. Sustainable development

Students will:

- point to the fact that non-renewable energy resources are limited
- name renewable and non-renewable energy resources and discuss their efficiency and environmental impact
- specify examples of the production and consumption of food in the world
- describe environmentally friendly ways of producing food
- explain on a simple example how local changes affect biosphere
- name some of the most famous protected sea and land areas in Croatia
- discuss the problems of nature protection by using an example from their own environment
- name protected sea and land areas in Croatia.

II. PLANET EARTH

1. Spatial orientation

Students will:

- learn spatial orientation using the map of the town or village and geographical map of the county, Croatia and the world.

2. Earth in the solar system

Students will:

- recognise and define basic concepts of space and the solar system
- differentiate between space bodies
- explain the position of the Earth in the solar system
- describe the impact of the Earth's rotation around its axis and around the Sun on the life of people and economic activities.

3. Natural environment of the Earth (relief, climate, water, soil, flora and fauna)

Students will:

- describe the elements of natural environment in Croatia and the world
- describe natural and geographical processes in their home town/region, Croatia and the world.

4. Natural resources

Students will:

- differentiate between natural resources in Croatia and on individual continents
- describe connections between elements of natural environment and spatial distribution of natural resources in their home town/region, in Croatia and the world.

5. Presenting phenomena and spatial processes

Students will:

- present spatial phenomena and processes in different scales

- make simple sketches of blueprints
- present phenomena and spatial processes in simple charts and topical maps.

III. MATERIALS AND THEIR PROPERTIES

1. Types and sources

Students will:

- list basic elements of a living organism (water, salt etc.).

2. Structure and properties

Students will:

- describe some properties of substances (boiling point, melting point, density, solubility).

3. Recognising material properties and handling materials

Students will:

- measure volume, mass, temperature, and time.

4. Chemical changes and reactivity

Students will:

- observe temperature changes in the process of burning
- describe changes in the process of solution.

IV. LIFE

1. Biodiversity

Students will:

- use a microscope in observation
- describe some useful and some harmful micro organisms
- differentiate between basic types of benthic communities.

2. Mankind and health

Students will:

- differentiate between physical characteristics of men and women
- describe changes in girls and boys in puberty
- explain the importance of a healthy diet and hygiene for human health
- describe factors that can permanently impair health.

3. Life processes

Students will:

- describe, on the basis of observation, various phases in the life of some organisms and compare them with phases in human life
- describe the structure and functions of plants and animals.

4. Heredity and evolution

Students will:

- describe and provide examples for the changes living beings have undergone throughout history
- describe common properties and relationships between certain groups of living beings
- describe man's role in selecting and growing plants and farming animals.

5. Ecosystems

Students will:

- describe the adaptation of living beings to specific types of habitats in Croatia and explain how changes in the environment can affect them
- explain man's role in the exploiting, changing, and protecting nature
- describe changes of substances and flow of energy in food chains.

V. MOTION AND FORCE

1. Motion

Students will:

- describe motion of objects and describe some natural phenomena, such as the wind, waves and living beings
- measure and express in a number and a unit of measurement, and present by a histogram, the distance travelled by objects in motion in equal intervals.

2. Forces and fields

Students will:

- exemplify and describe interactions between objects
- discuss how magnets can respond to one another at a distance
- describe the magnetic effect of the Earth.

3. Electrodynamics

Students will:

- connect a simple electric circuit by using an electric battery, a conductor, and a light bulb
- discuss a simple model of an electric circuit.

4. Oscillation, waves, sound

Students will:

- describe the phenomenon of oscillations in nature
- explore how waves form and propagate through water; describe waves in terms of the following concepts: crest, trough, circular wave, plane wave
- explore the formation of sound in various sources and describe its propagation through various media.

VI. ENERGY

1. Work and energy

Students will:

- describe various forms of energy and transformation of one form of energy into another
- explain the importance of the energy of the Sun for the life on Earth.

2. Electromagnetic waves and light

Students will:

- independently use a magnifier and a microscope
- explain what a rainbow is.

3. Atoms, atomic nucleus, elementary particles

Students will:

- explain the concept of microcosm on the experience of observation by a magnifier and a microscope.

4. Evolution of space

Students will:

- discuss, on the basis of observation, the differences in the night sky in the course of seasons
- draw the Earth in the solar system and the Moon as its natural satellite

- discuss, on the basis of observation, visibility of stars and planets through a telescope
- explain stars as objects of equal kind as the Sun and their appearance in the sky
- describe the Sun (sunlight) as the Earth's primary source of energy.

The third cycle

I. NATURE AND MANKIND

1. History of science and development of civilisation

Students will:

- differentiate between the geocentric system and the heliocentric system
- differentiate between the scientific and religious explanations of the origin of the world
- connect the history of science with the development of technology using concrete examples.

2. Research and communication

Students will:

- carry out simple research using experiments or observation
- compare and systematically organise the results of the experiments (or the observation)
- present the results (of the observation and/or measuring) in a table, graph, as a mathematical expression, in a map etc.
- when explaining natural phenomena and processes and presenting the results of experiments (or observation), use scientific concepts, models and figures (obtained by measurements) and present them in tables, charts, etc.
- look for necessary information in technical journals or on the Internet
- use the International System of Units.

3. Sustainable development

Students will:

- identify primary problems related to the quality and quantity of potable water on Earth
- discuss the importance of electric energy
- differentiate between benefits of the sea and point to the harmfulness of its excessive exploitation
- describe and analyse the main causes of global changes
- analyse management of hazardous waste
- discuss the values closely related to the concept of sustainable development.

II. PLANET EARTH

1. Spatial orientation

Students will:

- learn spatial orientation using topographic maps and maps of continents
- use plans of towns or villages, topographic maps, compass and GPS for spatial orientation and as sources of information.

2. Earth in the solar system

Students will:

- explain causes and consequences of the motion of the Earth
- explain how the Earth's rotation around its axis and around the Sun affects the life of people.

3. Natural environment of the Earth (relief, climate, water, soil, flora and fauna)

Students will:

- describe and compare elements of natural environment at the local, regional, national, and continental levels
- explain natural and geographical processes in their home town, region, Croatia, and on individual continents.

4. Natural resources

Students will:

- explain the impact of elements of natural environment on spatial distribution and evaluation of natural resources in Croatia, Europe and the world.

5. Presenting phenomena and spatial processes

Students will:

- on the basis of given information, present phenomena and spatial processes in blueprints (sketches), charts, tables and topical maps.

III. MATERIALS AND THEIR PROPERTIES

1. Types and sources

Students will:

- describe celestial bodies (space, stars, planet)
- describe organic substances from living organisms.

2. Structure and properties

Students will:

- describe the effect of different substances on living beings
- describe corpuscularity of matter, use models and basic symbols
- describe force of attraction between particles and connect it with melting point and boiling point
- differentiate between cleavage and malleability
- connect ionic structure and conductivity
- connect solubility and polarity of solvents
- differentiate between pure substance and mixture
- differentiate between simple substances and complex substances
- propose methods for isolating a substance from a mixture.

3. Recognising material properties and handling materials

Students will:

- describe relationships between a number of substances
- describe the indestructibility of the atom
- recognise basic laboratory glassware for measuring and conducting experiments
- describe the risks of common flammable, explosive, poisonous, and corrosive substances and specify respective protective measures to be taken when handling those substances.

4. Chemical changes and reactivity

Students will:

- explain chemical changes
- connect processes and related energy changes
- describe diffusion and osmosis

- describe how chemical reactions may be sources of energy
- differentiate between the impact of concentrations (in terms of more concentrated and more diluted) of reactants, temperature and catalysts on the velocity of the reaction.

IV. LIFE

1. Biodiversity

Students will:

- describe some types of living beings and categorise them into appurtenant system categories
- specify the importance of micro-organisms in the circulation of substances on Earth.

2. Mankind and health

Students will:

- describe organs of the human body and their functions
- specify and describe the most frequent disorders in the functioning of organic systems of the human body
- describe how the nervous system and hormones control various processes in the organism
- describe fertilisation, development of the embryo and foetus and birth of the child.

3. Life processes

Students will:

- describe the role of metabolic processes in the cell
- describe life cycles of the cell
- compare structures and functions of human organs and body systems with those of the representatives of the main groups of animals.

4. Heredity and evolution

Students will:

- name the main parts of the cell and describe their structure and role
- establish the existence of the hereditary molecule in which the information is transferred to the posterity
- describe various phases of life cycles of plants and animals on the basis of observation
- explain the importance of variability for the formation of new species and their survival in changeable conditions.

5. Ecosystems

Students will:

- describe the interdependence and adaptation of living beings in the ecosystems of Croatia and those of different continents
- describe examples showing how changes in the nature and human activity affect ecosystems
- define the importance of the ozone layer in relation to solar radiation and hazards arising from ozone layer depletion.

V. MOTION AND FORCE

1. Motion

Students will:

- explain the concepts of travelled distance, mean and current velocity and acceleration and apply those concepts on the examples of non-uniform, uniform and uniformly accelerated linear motion
- explain the free fall and give examples
- describe motion in various presentations.

2. Forces and fields

Students will:

- explain, measure and differentiate between mass, gravity force and weight
- apply the second and third Newton's laws of motion
- explore and apply the description of friction and elastic force
- on the basis of examples, describe and measure pressure
- explore and apply the balance of the lever
- describe the interaction between electric charges and the effect of electric and magnetic forces at a distance.

3. Electrodynamics

Students will:

- compose and draw direct current circuits and explain the role of every part of electric circuit
- explore and describe electric power, voltage and resistance for various materials and states of matter
- measure electric power and voltage and apply Ohm's Law
- explain protection from electric shock and first aid in case of electric shock
- present and specify the application of the magnetic effect of electric current and inducing voltage in a coil, by the movement of the magnet relative to the coil.

4. Oscillation, waves, sound

Students will:

- explore wave phenomena (reflection and refraction) and types of waves, and explain the propagation of the wave
- describe the relation of wave length, frequency and velocity of wave and apply it to examples
- describe the formation and propagation of sound in various media and explain it as oscillation of constituent particles of the media.

VI. ENERGY

1. Work and energy

Students will:

- explain kinetic and potential energy, connect them with work and describe transformations of energy
- describe, explain and apply action of force and power on examples from everyday life
- describe and specify differences between internal energy, heat and temperature and explain the change of internal energy
- describe transitions between states of matter
- calculate work and strength of electric power by using measured quantities
- explain the law of energy conservation on various examples.

2. Electromagnetic waves and light

Students will:

- explain the idea of linear propagation of light at the highest speed in nature
- explore and apply regularities of reflection and refraction of light
- describe separation of white light into its components (colours) and provide examples.

3. Atoms, atomic nucleus, elementary particles

Students will:

- describe differences between solids, liquids, gases and plasma
- explore and describe density of substances and differentiate between the density of substance and the density of body
- explain corpuscularity of matter and the existence of space between particles.

4. Evolution of space

Students will:

- describe the position and features of the Sun in the Milky Way galaxy and planets and the size of the solar system
- explain the concept of galaxy and discuss the numerosity of galaxies in space, the numerosity of stars in each galaxy and the distance and visibility of the nearest galaxy.
- compare the distance of the Sun and other stars from the Earth in terms of the time necessary for light to travel from them to the Earth
- analyse distances in space in terms of light years.

The fourth cycle (vocational schools)

I. NATURE AND MANKIND

1. History of science and development of civilisation

Students will:

- analyse scientific and technological revolution
- explain the development and the application of mechanics, electrical engineering and modern technology
- describe rationalistic and empiristic worldviews.

2. Research and communication

Students will:

- explain natural phenomena/interactions in terms of basic principles of natural sciences, using scientific terminology
- analyse examples of conducted experiments and apply methods of processing and presentation of results
- discuss and explain conclusions.

3. Sustainable development

Students will:

- analyse dependence of economic development on energy resources
- analyse dependence of economic development from the aspects of various social groups and present it in various ways
- explain energy efficiency and compare renewable energy resources with non-renewable ones
- analyse the global problems of water supply
- discuss advantages and disadvantages of different sources of energy
- analyse waste management methods used at the local and the global level
- assess potential future sizes of protected areas in Croatia and the world.

II. PLANET EARTH

1. Spatial orientation

Students will:

- use plans of town or villages, topographic maps, compasses and navigation (GPS) devices for spatial orientation

- describe modern instruments for spatial orientation and explain their application.

2. Earth in the solar system

explain the position of the Earth in the solar system

3. Natural environment of the Earth (relief, climate, water, soil, flora and fauna)

Students will:

- describe differences between elements of the natural environment on the local, regional, national and continental level
- explore and analyse natural and geographical processes on the local, regional, national and continental level.

4. Natural resources

Students will:

- Investigate how natural resources are treated in their home town, Croatia and in the world.

5. Presenting phenomena and spatial processes

Students will:

- present phenomena and spatial processes on the basis of given information in blueprints (sketches), charts, tables, and topical maps
- use simple computer programmes in the presentation of spatial phenomena and processes.

III. MATERIALS AND THEIR PROPERTIES

1. Types and sources

Students will:

- describe space and celestial bodies and compare them with respect to their properties and origin (space, stars, planets)
- explain the complexity of substances in living organisms and recognise elements of their structure (functional group) which determine their essential properties
- describe the properties of synthesised substances and their application.

2. Structure and properties

Students will:

- on a model of structure of substances, explain properties of different physical states of substances
- notice the three-dimensional (spatial) structure of molecules and explain the consequential properties of substances (stereoisomerism).

3. Recognising material properties and handling materials

Students will:

- recognise and know how to use basic laboratory glassware for measuring and conducting experiments
- determine some substances according to their physical properties
- determine some substances according to their reactions with selected reagents.

4. Chemical changes and reactivity

Students will:

- describe spontaneity of physical and chemical processes
- describe how we can affect speed and balance of processes by changing conditions.

IV. LIFE

1. Biodiversity

Students will:

- analyse the link between biological diversity and sustainable development
- define the scientific way of classifying living beings.

2. Mankind and health

Students will:

- explain the basis of the structure and the functions of the human body
- apply and explain primary principles of health protection and hygiene and develop positive attitudes to and responsibility for their health and public health
- discuss addictions and other factors that jeopardise one's health and life
- compare and explain various views of sexuality; differences in sexual orientation, contraception methods, abortion and sexually transmitted diseases.

3. Life processes

Students will:

- describe the basic process whereby the genetic information is transferred from parents to posterity
- explain how cells use substances and energy for sustaining life.

4. Heredity and evolution

Students will:

- explain the universality of cell structure
- describe the structure and role of the molecule responsible for the transmission of genetic information
- specify and explain the core principles of heredity
- explain the common origin of living beings
- describe the processes that have led to the biodiversity.

5. Ecosystems

Students will:

- analyse man's impact on nature and changes in the ecosystem and anticipate possible consequences of that effect on the local and global level.

V. MOTION AND FORCE

1. Motion

Students will:

- apply the concepts of shift, distance, velocity and acceleration on linear motion and on uniform circular motion
- analyse vertical and horizontal shot.

2. Forces and fields

Students will:

- describe force impulse and the quantity of motion (momentum)
- apply the first, the second and the third Newton's law of motion
- apply the law of gravity
- measure centripetal force and apply its expression
- apply description of the action of force in liquids and gases

- present and explain interaction of electric charges and apply Coulomb's law and basic concepts for electric field.

3. Electrodynamics

Students will:

- explain concepts on which the motion of electric charge depends, and the concepts that describe it, and apply them to direct current and alternating current circuits
- measure voltage, electric power and resistance and apply Ohm's law on direct current and alternating current circuits
- apply the description of magnetic effect of electric power and action of force on charge in motion and on conductor conducting electricity in a magnetic field
- conduct an experiment and apply Faraday's law of induction.

4. Oscillation, waves, sound

Students will:

- explain and apply harmonic oscillation with resonance phenomenon
- apply the description of wave motion and sound waves.

VI. ENERGY

1. Work and energy

Students will:

- apply the concepts of work, power, kinetic, and potential energy
- apply laws that describe the ideal gas and the laws of thermodynamics
- explain and apply electric potential energy and work and strength of electric power
- apply the law of conservation of energy.

2. Electromagnetic waves and light

Students will:

- describe electromagnetic oscillation and electromagnetic spectrum
- explain the application of electromagnetic waves in remote transmission of information
- apply laws of geometrical and wave optics on light
- describe and explain electron diffraction by wave nature of particles.

3. Atoms, atomic nucleus, elementary particles

Students will:

- explain concepts, ideas, and theories describing the atom, atomic nucleus, the appearance of radioactivity, and quantisation
- describe and explain the photoelectric effect by corpuscular nature of light
- explain the application of nuclear energy.

4. Evolution of space

Students will:

- on the basis of observation, describe main celestial bodies: stars, constellations, galaxies and clusters of galaxies
- explain the Big Bang theory as the beginning of space-time and expansion and cooling of space after the Big Bang
- discuss permeating of space by gravitational force
- describe the evolution of the Sun and its radiation
- describe the age of the Earth in relation to space and establish the time period since the advent of *Homo sapiens*
- explain thermonuclear processes in stars and radiation of energy
- describe the ratio of dark matter and visible matter in space.

The fourth cycle (grammar schools)

I. NATURE AND MANKIND

1. History of science and development of civilisation

Students will:

- describe the theories of thermodynamic, biological, geological, and cosmological evolution
- provide arguments in support of scientific worldview
- explain reductionism and holism
- discuss the role of quantum hypothesis in the understanding of the structure of the matter.

2. Research and communication

Students will:

- explain natural phenomena/interactions/processes in terms of the basic principles of science and using scientific terminology
- use models in explaining specific natural processes
- apply basic scientific principles in solving hypothetical problems and tasks
- connect theory and experiment
- devise and conduct experiments (observations) to examine interdependence of certain variables in relation to control variables
- analyse, evaluate, and interpret collected data and sources of data
- use information technology in collecting, processing, and presenting data
- assess limitations of the applied methods, techniques, models, and theories.

3. Sustainable development

Students will:

- analyse the impact of human activities on the changes of agricultural land and natural habitats
- discuss the protection and the improvement of health on the global and regional levels
- connect energy consumption with the pollution of the atmosphere
- point to the hindrances that we encounter in an effort to live in harmony with nature
- compare methods for the generation of electric energy and their impact on the environment
- analyse the methods of waste management on the local and global level
- assess the possibility of future enlargement of protected areas in Croatia and the world.
- explain the need for the development a new technologies (nuclear power plants, new types of fuels, nanotechnology).

II. PLANET EARTH

1. Spatial orientation

Students will:

- use plans of town or villages, topographic maps, compasses and GPS for orientation in space
- apply contemporary technical orientation instruments.

2. Earth in the solar system

Students will:

- explain the structure of space, the solar system and the Big Bang theory.

3. Natural environment of the Earth (relief, climate, water, soil, flora and fauna)

Students will:

- single out advantages and disadvantages of elements of the natural environment and plan their optimal evaluation
- explore, analyse, compare, and evaluate natural and geographical processes on the local, regional, national, and continental levels
- explain the differences among systems responsible for changes on the surface of the Earth.

4. Natural resources

Students will:

- explore and compare ways of evaluation and rational management of natural resources on the local, regional, national, continental, and global levels.

5. Presenting phenomena and spatial processes

Students will:

- present the phenomena and spatial processes on the basis of assigned and individually collected data using blueprints (sketches), charts, tables, topical maps, and computer programmes
- use simple computer programmes in the presentation of spatial phenomena and processes.

III. MATERIALS AND THEIR PROPERTIES

1. Types and sources

Students will:

- describe substances from the non-living world and compare them with respect to their properties and origin (space, stars, planets)
- analyse the complexity of substances from the living world and identify elements of their structure (functional group) that determine their essential properties
- describe properties of synthesised substances and their application.

2. Structure and properties

Students will:

- explain properties of substances in various states of matter (by using models of structure of substances)
- connect the structure of the atom with the position of an element in the Periodic Table of the Elements (PSE)
- from the position in the Periodic Table of the Elements, anticipate some properties of elemental substances and simple compounds
- using models of the structure of molecules, explain the properties (polarity, optical activity) of substances
- connect absorption spectrums (UV, IR, MS, NMR) with the molecular structure
- notice the three-dimensional (spatial) structure of molecules and explain the consequential properties of substances (stereoisomerism)
- describe chirality and complexity of biological compounds.

3. Recognising material properties and handling materials

Students will:

- describe the main methods of qualitative and quantitative analysis of the composition of samples
- correctly express the quantitative composition of samples
- use basic laboratory glassware for measuring and conducting experiments
- analyse some substances according to their reactions with selected reagents

- analyse some substances according to their physical properties
- connect properties of substances with structural properties of molecules (functional groups)
- classify substances according to structural properties of molecules (hydrocarbons, alkenes, alcohols. etc.)
- connect structural properties of molecules with measurable properties of substances (spectrums, solubility etc.)

4. Chemical changes and reactivity

Students will:

- describe the conditions of spontaneity of physical and chemical processes
- describe the state of equilibrium as the most probable state a particle system
- explain large differences in the speed of reaction and factors that can affect the speed of processes (concentrations of reactants, temperatures, catalysts)
- describe the reactions instigated by light or electric power
- explain the concept of dynamic equilibrium and factors affecting it (concentrations, pressure, temperature)
- explain how reactions may be sources of thermal energy (heat measurement)
- explain how reactions may be sources of electric energy (electrochemical cells)
- differentiate between properties and reactivity of the most frequent inorganic and organic compounds
- classify chemical reactions according to the nature of changes in molecules (addition, elimination, substitution)
- explain reactivity and interaction of substances on the basis of structural properties of molecules.

IV. LIFE

1. Biodiversity

Students will:

- assess factors affecting biological diversity and sustainability of life in biosphere
- describe the significance and role of micro-organisms, protoctists, plants, and animals in biosphere and explain their relationship with man
- analyse the scope of diversity of the living world on the level of molecular organisation
- analyse the impact of evolutionary processes on biodiversity.

2. Mankind and health

Students will:

- analyse the basis of the structure and functions of the human body
- specify the most frequent causes of health problems and explain methods of their prevention and treatment
- compare and explain various views on sexuality; differences in sexual orientation, contraception, abortion, and sexually transmitted diseases.

3. Life processes

Students will:

- analyse the relationship between the structure and role of living organisms
- identify differences in the propagation and growth of various species.

4. Heredity and evolution

Students will:

- analyse the primary principles of heredity and common origin and the development of the living world
- explain the molecular organisation of the cell, genetic code, and protein synthesis
- analyse how evolution processes affect biodiversity
- explain the possibilities of changing genetic material, cloning of individual plant and animal species, and discuss potential applications and ramifications.

5. Ecosystems

Students will:

- differentiate between relationships throughout the ecosystem and analyse the effect of human activity on those relationships
- analyse mutual dependence of living beings in ecosystems
- explain how interaction of ecological factors and natural selection affect the robustness of different populations.

V. MOTION AND FORCE

1. Motion

Students will:

- apply the description of the linear motion and uniform circular motion by using kinematic quantities in solving problems
- analyse complex motions
- explain and specify differences between the translation (shift) and the rotation of a body.

2. Forces and fields

Students will:

- apply the first, the second, and the third Newton's law of motion
- apply the law of gravity
- describe dynamics of uniform circular motion and apply it
- explain inertia and accelerated systems
- apply the law of conservation of momentum
- apply the basic concepts of fluid mechanics
- present and explain interaction of electric charges and apply the Coulomb's law
- apply the basic concepts of the magnetic, electric, and gravitation fields.

3. Electrodynamics

Students will:

- measure and explain electric quantities in electric circuits
- apply Ohm's law and the law of conservation of electric charge to direct current and alternating current circuits
- describe and apply the magnetic field of electric power
- apply the description of action of force on charge in motion and on a conductor conducting electricity in a magnetic field and description of forces among conductors conducting electrical power
- explore and apply Faraday's law of induction.

4. Oscillation, waves, sound

Students will:

- apply primary concepts related to driven and damped harmonic oscillation and resonance phenomenon
- describe the formation and propagation of various types of mechanical waves
- apply the description of wave motion on the sound waves phenomena.

VI. ENERGY

1. Work and energy

Students will:

- apply concepts of work and energy in mechanical systems
- explain the basis for internal energy of substances in terms of the motion of its particles (kinetic theory of internal energy)
- apply the concepts of work and energy in thermodynamic systems
- apply the concepts of work and energy in electromagnetic systems
- apply the law of conservation of energy.

2. Electromagnetic waves and light

Students will:

- explain electromagnetic oscillation and the origin, propagation, and electromagnetic spectrum of electromagnetic waves
- explain the application of electromagnetic waves in remote transmission of information
- apply the laws of geometrical and wave optics on light
- describe and explain electron diffraction by wave-like nature of particles
- explain and apply the basic ideas of the special theory of relativity.

3. Atoms, atomic nucleus, elementary particles

Students will:

- discuss the basic ideas and concepts of the quantum theory and concepts and theories that describe the atom, atomic nucleus, appearance of radioactivity, and elementary particles
- explain the photoelectric effect and its application
- explain nuclear power generation
- explain using examples the basics of semiconductor electronics and nanotechnology.

4. Evolution of space

Students will:

- on the basis of observation, describe the main celestial objects: stars, constellations, galaxies, and clusters of galaxies, and differentiate between stars in terms of their size, temperature, and age
- explain the Big Bang theory as the beginning of "space-time" and the expansion and cooling of space after the Big Bang
- discuss permeating of space by gravitational forces
- explain the processes of formation and evolution of stars (supernova, neutron stars, pulsars, quasars, black holes) and the evolution of the Sun
- describe the age of the Earth in relation to space and establish the time period since the advent of Homo sapiens
- describe the ratio of dark matter and visible matter in space
- present and explain simple models and simulations of planetary and stellar systems.

SUBJECT FRAMEWORK OF THE AREA: Nature and Society, Nature, Geography, Biology, Chemistry, Physics.

4. Technical and Informatics Area

DESCRIPTION OF THE AREA

Technics (Croatian: *tehnika* - Greek *tehne* = art, know-how, proficiency, skill) has existed ever since people made the first stone blades, built a fire, and poked the earth by a pointed stick in order to plant seeds. To the day it has developed to an unprecedented level. Airplanes, trains, and automobiles carry people and freight at high speed, from one place to another. Telephones, television, and computer networks help people in interpersonal communication around the world; rockets penetrate into outer space, and various probes into the deep sea. Medicines and medical devices enable people to live longer and have healthier lives. The Croatian word *tehnika* refers to all tools, devices, systems, and procedures made by man to adapt the natural environment to his needs.

Just as the natural sciences deal with nature, revealing its patterns and describing its phenomena, technical sciences – on the basis of those phenomena – define principles according to which products, services, and systems for satisfying specific human needs can be produced. Innovation and creative discoveries are the very foundations of technical development and progress. The concept of innovation applies to the whole range of changes – from small daily improvements and upgrades of existing products and services, to radical changes that yield new products and services and generic changes, which create new branches of industry.

New products and services are often upgraded or invented through creative composition and merging of previously elaborated principle.

Technics fall into areas that may be called technologies. The term *technology* (Croatian: *tehnologija*) has multiple meanings, from the name of a procedure or process (production, business, education, healthcare), to the name of a technical branch (chemical technology, mechanical engineering technology, building technology, medical technology, information and communication technology). The term *technology* also sometimes overlaps in meaning with the term *technique*. The term *technics* is also often used to denote technical contraptions (tools, devices, machines), while the term *technology* refers to the processes involved in construction / production / manufacture / workmanship. Hence the meaning of these terms must often be worked out from the context.

Nowadays, information and communication technology (ICT) have a particularly important role. Therefore, ICT has been given a special focus in this educational area, which is reflected in the very name of the area. It also has an alternative name: *information society technology*. The name informatics (coined from French words *information* and *technique*) brings together the areas of information sciences and computing. Informatics, with no exception, is applied in all areas of human activity. In the European Competence Framework, proficiency in informatics is listed as one of the eight key competences – the so-called *digital competence*.

The technical and informatics area enables students to acquire knowledge, develop working skills and the know-how of using technical products in everyday life, work and learning; it also develops knowledge of economic and ethical values of human work. In this area students also gain the basic understanding of the information society technologies. To become successful individuals, adaptable to rapid changes in society, science and technology, students need to learn about technology and information and communication technology, and develop skills and competences to be able to apply this knowledge in various circumstances. They should also develop the awareness of its possibilities, limitations, advantages and disadvantages.

For the reasons indicated above, the following is crucial in the development of every individual: the knowledge and understanding of technics, technology and informatics; the awareness of the production, which is instrumental to survival and sustainable development; the basic understanding, the skills of handling and managing technical devices and systems, and the knowledge necessary for choosing appropriate materials, work resources and methods; skills of using various technical devices; basic knowledge and skills of applying information and communication technology; competence necessary to design and assess the aesthetic value of various products and services.

Also, students will gain understanding of the principles of operation of technical systems. It is essential that they understand technology as the body of knowledge and processes that can be used to create new (material and non-material) values, based on the scientific knowledge and the respect for the relevant social, ecological, aesthetical and ethical values. In doing so, it is important to understand the concept of engineering (Croatian: *inženjerstvo*) as the process of creation of products or services and realise that a specific problem can be solved in a number of ways, which need to be assessed against the set conditions, having in mind that there are no perfect solutions, only optimal ones.

Working independently, students will acquire knowledge of the fundamentals of technical creativity. More complex problems are solved in groups, where the competences and skills of individuals become prominent and students develop the ability to work in a team. Practical student assignments within carefully developed technological projects allow students to acquire knowledge, skills and attitudes necessary for participation in the inventive (innovative) and competitive entrepreneurship and for the development of the *learning-to-learn* competence.

Learning and teaching in the area of information and communication technology will enable students to effectively use computer and user programmes, to acquire fundamental knowledge of basic principles behind computers, systems and information society infrastructure, as well as to develop skills and competences involved in the application of information and communication technology in problem-solving in various areas. All those achievements are further enhanced by means of interdisciplinary themes.

Today there are many computer-controlled devices, installations and production procedures. Interdisciplinary collaboration between experts of various technical and art areas and experts of areas of informatics and computing may result in new products and services. Within this area Students will be familiarized with those opportunities, so that in the future they could improve the quality of life in their immediate and wider community.

EDUCATIONAL GOALS OF THE AREA

Students will:

- come to understand the role and impact of technology on changes in the modern world
- come to understand technology as the outcome of centuries of creative human competences and its role and impact on the changes in the modern world
- come to understand the role of science and mathematics in the creation and use of technical products and services
- acquire knowledge and develop motor skills, know-how, competences, and self-confidence in handling various implements, tools, devices, and machines, used at home and elsewhere
- learn how to use computer and information and communication technology in learning, working, and everyday life
- develop an algorithmic thinking pattern; acquire skills and competences for the use of computers in problem-solving in various areas of application
- develop competences in technical and informatics communication and use technical and informatics documentation
- acquire knowledge, skills and attitudes necessary for making rational decisions pertaining to work and production, environment, sustainable development while respecting safety, ethical, economic, ecological and cultural principles
- develop critical thinking skills and competences for aesthetic evaluation and design of products and services
- become well-informed consumers who will be able to assess the technical properties of products and services
- be trained for a proper and appropriate choice of continuation of schooling and interest.

EXPECTED STUDENT ACHIEVEMENTS PER EDUCATIONAL CYCLE

The first cycle

I. TECHNICAL CREATIVITY

1. Practical work – making products by aesthetic manipulation of materials

Students will:

- shape various handicrafts, for instance souvenirs or practical objects from various materials, without utilisation of tools
- design and make handicrafts - as souvenirs and other practical objects– based on templates or of free choice from the Croatian national heritage, by shaping various materials and use of instruments and simple tools

- describe and give comments on the procedures involved in making handicraft
- develop fine motor skills by joining construction elements together.

2. Planning and evaluating products and services

Students will:

- participate in finding solutions to assigned problems by considering a number of ideas
- develop the project necessary to make the product
- calculate the value of the product by taking into consideration the value of used materials and work, and determine its price for the potential placement of the product on the market
- assess, with the assistance of the teacher, the aesthetic and the practical value of the product with respect to the set objectives.

3. Instruments, tools and machines for material and product design

Students will:

- list the tools people have used to improve their life and make it easier
- demonstrate the use of specific contraptions and learn how to disassemble and re-assemble them
- explain why it is necessary to maintain instruments, tools and devices in working order and clean
- recognise and explain the purpose of technical symbols and signs that students encounter in everyday life.

4. Assembling systems from electrical engineering, electronics and robotics

Students will:

- assemble a simple electric circuit using low-voltage components.

5. Safety at work and traffic safety

Students will:

- organise workplace so as to minimise chances of injury
- adhere to safety rules with respect to materials, tools and devices
- learn about proper and improper behaviour of pedestrians and cyclists in traffic
- participate in traffic by observing traffic signs and rules
- anticipate and avoid potentially dangerous situations involving non-observance of traffic rules and failure to use legally required equipment
- handle traffic situations on templates and on site and describe possible hazards in traffic arising from non-observance of traffic rules.

II. THE WORLD OF TECHNICS

1. Features and the basic concepts of technics

Students will:

- explain the difference between the world of nature and the man-made technical world
- list various tools and explain why people use them when making necessary and useful products
- describe core technical functions of small electronic devices known to them from everyday life and how to handle them properly
- describe professions and trades and crafts of persons they encounter in everyday life.

2. Cultural, social, economic and political impacts of technical development

Students will:

- explain how technical development, i.e. technical inventions have affected life style and quality of life

- describe how technical development has coincided with the development of agriculture, construction, transport, tools and machines
- demonstrate on the example of a project how an idea is materialised through a creative process.

3. Energy in everyday life and production

Students will:

- explain the importance of energy for human life and work: solar energy is the source of life
- establish that energy can take various forms
- explain why energy should be conserved and saved
- enumerate the types and forms of energy used in a typical household
- describe hazards people can be exposed to due to improper use of devices
- list different types, shapes and applications of batteries and explain the difference between regular batteries and automotive batteries
- differentiate between several types of light bulbs and explain the importance of use of energy saving light bulbs in the household

4. Modern technologies

Students will:

- describe how modern technical tools and devices serve people in quick and successful performance of activities in construction, agriculture, transport and medicine and in everyday life.

5. Technology and the environment

Students will:

- differentiate between garbage and waste
- explain the importance of the protection and preservation of the environment and the hazards related to environmental pollution caused by negligence of each and every individual
- collect, separate and properly dispose of waste from school and their own homes
- be active in the preservation of cleanliness of water
- participate in school eco-activities: collecting waste and proper care of the environment.

III. INFORMATION AND COMMUNICATION TECHNOLOGY

1. Basic information and communication technologies

Students will:

- explain in what ways they communicate with friends and within families and how they find answers to their questions
- describe their fun activities in which they use information and communication technology
- recognise the difference between data and information
- come to understand that people exchange ideas by exchanging information in oral, written or imaging form by using various agreed symbols
- recognise that information and communication technology facilitates exchange of information.

2. Hardware and software

Students will:

- list visible external parts of the personal computer and their purpose
- master the proper procedure for turning the computer on and off
- learn how to start and exit an application
- name basic Windows applications and the procedure for shutting down the applications

- learn about elements on the desktop; icons and desktop shortcut symbols; using one-click and double-click commands
- describe what files and folders are and where they are located
- perform basic operations with folders and files (creating folders and sub-folders, moving and copying folders and files, performance of those actions by dragging).

3. Internet and network services

Students will:

- list basic Internet services (electronic mail, browsing of web pages, social networks)
- data exchange via electronic mail between students
- use some social networks under parent's or teacher's supervision.

4. Processing of sounds, drawings and images

Students will:

- properly use CD/DVD disks
- start and use educational applications and be able to find/manage them
- use a simple drawing programme (determine area of drawing, select the type of pen, drag the symbol of pen on the desktop)
- listen to audio records and view video records stored on a CD/DVD disk (know how to use command for start, stop and pause of reproduction and record own audio recordings)
- take a photograph
- save and view digital photographs.

5. Text processing

Students will:

- use a simple programme for writing texts and learn how to use the keyboard and mouse in the creation of a text
- properly process text using capital and small letters and punctuation
- choose page layout and page orientation
- save texts in files and open files with previously saved texts.

IV. COMPUTER-BASED PROBLEM-SOLVING

1. Basic programming

Students will:

- establish that by using appropriate programming aids they can create their own simple programmes
- use interactive interface for simple graphic programming immediately visible on the screen
- use simple commands for linear motion and the change of course of an object on the screen to draw simple geometric forms as the traces that the object leaves on their path
- recognise that a series of commands make up a programme that can be saved in a file and later run and modified.

The second cycle

I. TECHNICAL CREATIVITY

1. Practical work – making products by aesthetic manipulation of materials

Students will:

- make a technical drawing of the product
- in collaboration with other students, process materials to make practical objects in the way that they are traditionally made in the area in which the school operates

- make and aesthetically manipulate a product of one's own choosing for their personal needs, or to decorate the classroom or to sell.

2. Planning and evaluating products and services

Students will:

- elaborate a product design idea
- write an economic, technical and aesthetic analysis of the value of the designed product
- design a promotional leaflet for one's own product
- make a simple technical and economic analysis of the ratio of the invested resources – materials, work and energy – and the market value of the product or service
- evaluate the design of a specific product.

3. Implements, tools and machines for material and product design

Students will:

- explain the importance of resources – materials, tools and energy – in production and in everyday life
- explain how complex tools, elements of machines and mechanical engineering structures are made by very simple tools
- measure with analogue and digital measuring instruments
- describe devices and machines used in the household and their technical features and principle of operation.

4. Assembling systems from electrical engineering, electronics and robotics

Students will:

- differentiate between systems, subsystems and elements and their functional connectivity
- describe functions of individual components in the mechatronics and robotics systems assembly collection
- make their own models of functional constructions from construction elements
- compose simple models of traffic lights, as well as mechatronic, robotic and similar systems
- operate the construction manually and digitally, taking into consideration the laws of changed velocity and rotation direction
- describe the function of a gripper or grasper
- use algorithms and programmes and make their own for digitally controlling robot constructions.

5. Safety at work and in traffic

Students will:

- rationally organise workplace for conducting practical work
- adhere to the safety rules and use protective equipment in preparation of every product
- handle energy devices properly and in accordance with safety rules
- independently and successfully use bicycle in traffic
- list traffic rules and regulations governing the behaviour of participants in traffic
- participate safely and behave courteously in traffic, especially in the role of a pedestrian or cyclist.

II. THE WORLD OF TECHNICS

1. Features and basic concepts of technics

Students will:

- explain modern technics and technology as the result of human creativity; role of technology in solving social problems

- describe the features of various areas of technology and explain their role and significance in historical development
- explain the differences between crafts and industrial production, between individual and mass production
- explain the impact of market competition on production and the service sector
- explain the significance of technical education and training for successfully responding to everyday demands
- describe typical jobs in the production and service sector.

2. Cultural, social, economic and political impacts of technology

Students will:

- present examples in which, in the course of history, technology preceded scientific discoveries
- come to understand that technology is an essential determinant and element of material culture and civilisation
- explain that technology is not necessarily always good and it may have negative consequences if abused or misused
- explain how technics and technology impact scientific development, quality of life and life style
- come to understand that information and communication technology have significantly changed the modern world and brought about the development of globalisation.

3. Energy in everyday life and production

Students will:

- explain energy as one of the basic production, economic and social resources and reserves
- compare various forms of energy and their sources: solar, thermal, chemical, electric energy and the energy of motion
- explain the transformation of energy from one form into another and conversion of energy into mechanical work
- describe the principle of work, features and purpose of internal combustion engine and the difference between driving and operating engines
- enumerate chemical sources of energy and areas of their application
- explain possible hazards or harms that may arise as a consequence of inappropriate use of a product.

4. Modern technologies

Students will:

- come to understand that technological progress has yielded many technical systems that can detect diseases, provide treatment, and help maintain physical and mental health of people
- come to understand that people have created artificial ecosystems in which he grows plants and animals
- explain why various processes in agriculture and animal husbandry require various procedures, machines and systems
- come to understand that the means of transportation require maintenance and that the operation of transport systems essentially depends on people who participate in traffic in various ways
- come to understand that buildings and facilities are complex technical objects in which a number of systems and subsystems are built in and that they have to be maintained regularly.

5. Technology and the environment

Students will:

- come to understand that technology, besides the benefits for people, also has adverse effects on the environment and the ecosystem

- come to understand that waste, if managed well, may bring economic and ecological benefit (processing of glass, recycling of paper, processing of metal waste, biological waste is used for compost and generation of energy etc.)
- acquire an attitude about the need to behave in accordance with the rules of environmental protection and conservation of natural equilibrium in everyday life.

III. INFORMATION AND COMMUNICATION TECHNOLOGY

1. Fundamentals of information and communication technology

Students will:

- explain the difference between the concepts of knowledge, information and data
- describe the data storage and transfer methods in the recent past and further back in history
- describe that modern technology for data storage and transmission is based on the presentation of all forms of data in digital format in a series of bits.

2. Hardware and software

Students will:

- name the basic computer hardware parts (ROM and RAM or operating memory, processor, auxiliary memories, input-output devices)
- come to realise that the operational system is the basic programme that ensures a smooth functioning of all computer parts
- conclude that all programmes and all data that need to be stored permanently have to be stored in files on external memories
- use graphical user interface for organised storage and retrieval of files and differentiate between types of files according to contents
- describe that computers communicate so that the contents of memory of one computer are transferred into the memory of another computer by transmission paths, thus creating computer networks
- conclude that a standardised manner of transmission of separate data units has been agreed on world-wide.

3. Internet and network services

Students will:

- use software tools (browsers) for search of contents on web pages located on one of the computers connected with the Internet
- browse the contents of accessed web pages and move along the links in a set of related web pages
- use software tools for drafting and sending electronic messages
- respect ethical principles in using electronic and social networks.

4. Processing of sounds, drawings and images

Students will:

- use programmes for drawing to form their own drawings by using software tools for selection of the thickness of brush and choice of colours
- create new drawings by putting together and combining parts of drawings stored earlier
- using microphones connected with the sound card, record and store audio recording
- create a collection (an album) of audio recordings and transfer it to one of the devices for reproduction of sound
- create a collection of video recordings and play video recordings with one of the reproduction programmes.

5. Text processing

Students will:

- use an advanced programme for text processing and use a range of available options for text editing
- set up the page by changing the width of the margins and inserting symbols, the page numbers, headers and footers
- prepare a text separated in columns, inserting drawings and tables
- using a printer, print the text.

IV. COMPUTER-BASED PROBLEM-SOLVING

1. Basic programming

Students will:

- use more advanced commands and turtle graphics programme forms for solving more complex tasks by applying mathematics knowledge
- create simple programmes that will consist of input-level commands involving data entry, central-level commands involving calculation and output-level commands involving the presentation of the outcome of calculation
- use interactive programming language for writing and testing simple sequential programmes
- recognise that a series of commands, which appear more frequently in the programme, may be prepared as a subprogramme that is run (retrieved) as necessary
- establish that every programme has to be tested for accuracy.

The third cycle

I. TECHNICAL CREATIVITY

1. Practical work – making products by aesthetic manipulation of materials

Students will:

- based on a sketch or template, make a technical drawing for the development of a specific product using writing implements and a computer
- on the basis of the technical drawing and various processing methods, make a variety of products made of wood, stone, plastics, metal, or some other material using mechanical and power tools, devices and machines
- make or assemble various models using an instruction sheet.

2. Planning and evaluating products and services

Students will:

- explain the importance of planning and rationally using resources, time, energy and materials in the development of products
- assess options and select the more appropriate ones considering the product that they are making
- make a technical drawing for the development of a specific product, from the idea to the final product
- analyse various possibilities and propose the best solutions for the choice of materials, resources, and the method for the development of a specific product
- do a study on the promotion and presentation of the product on the market
- establish the principles and evaluate the quality and applicability of their work and the work of other students.

3. Implements, tools and machines for material and product design

Students will:

- describe technical features of tool machines and the possibility of processing of materials
- explain how analogous and digital measuring instruments work and their application
- select an appropriate material according to properties necessary for work and purpose of specific products.

4. Assembling systems from electrical engineering, electronics and robotics

Students will:

- select on the basis of labels and symbols the properties of corresponding elements for making simple electric and electronic systems
- assemble, based on an instruction sheet or a template, electric and electronic systems and devices
- connect electric and electronic elements into systems on the basis of an instruction sheet and using the universal experiment plate
- measure electric power using various measuring instruments
- assemble simple robot constructions on the basis of enclosed manuals or original design
- use a computer to develop a program for remote control of models of appropriate robot and robot-like structures, with or without the possibility of two-way communication
- analyse movements, requirements of the construction, degrees of freedom and axes of rotation, gripper or graspers in the robot's manoeuvre area
- apply microcontrollers in the control of robot constructions.

5. Safety at work and in traffic

Students will:

- adhere to safety rules when working with electric power or pressurised vessels so as to eliminate hazard risks
- maintain technical devices and systems as required by instruction manuals
- specify rules and explain technological reasons for proper maintenance of the workplace, working resources and materials
- explain physical, economic, ecological and social damage that may arise as a consequence of non-rational organisation or failure to adhere to work safety rules.

II. THE WORLD OF TECHNICS

1. Features and basic concepts of technics

Students will:

- come to understand that the technological development is focused on fulfilling specific human needs
- come to understand that the development of new products is strongly connected with creativity and technical creativity
- explore and describe the most important technical inventions using the information and communication technology and technical books
- explain the common features of technical and biological systems
- explain the importance of technology for the development of individual production, services and public activities
- explain functional dependence of technics, technology, materials, energy and working resources for the production of goods
- explain mechanical, physical and chemical properties of various materials and possibilities of their application in electrical engineering, electronics, automatics, robotics, and in the household.

2. Cultural, social, economic and political impacts of technology

Students will:

- explain the role of scientific institutions in creating new technological solutions, materials, and devices
- explain the role of technology in scientific, social and economic development, as well as in the quality of life and lifestyle
- come to understand that technological development significantly affects economic, political, and cultural development
- come to understand that ethical values are significant for the development, choice and use of specific technology
- come to understand that technology has, throughout human history, been a mighty force in transforming social, cultural, political, and economic reality.

3. Energy in everyday life and production

Students will:

- explain economic and social significance of energy and the need for rational consumption in all areas of human activity
- come to understand that in the course of history natural energy sources have been the cause of many political conflicts
- explain the features of solid, liquid and gaseous fuels as sources of energy as well as the renewable energy resources
- explain the importance of a rational utilisation of conventional and renewable energy resources
- describe electrical machines as driving engines and operating engines and explain the principle of their operation
- describe the principle of operation of a direct current and alternating current generator
- assemble electric installations, according to a wiring diagram or a template, on an experiment board
- describe the process of generation and transmission of electrical energy.

4. Modern technologies

Students will:

- explain how natural sciences and technology have worked together to bring about state-of-the-art medical equipment and systems
- come to understand how progress in agricultural technology directly reduced the number of people who produce food to supply the population
- come to understand that agricultural products are used for purposes other than food
- establish that transportation vehicles are complex technical systems consisting of a number of subsystems and elements that have to work harmoniously together
- come to understand that information and communication technology is applied to transport systems for purposeful harmonisation of transport processes
- come to understand that construction of buildings is regulated by laws and regulations and subject to zoning plans.

5. Technology and the environment

Students will:

- handle work materials and tools (devices, machines, installations and hazardous materials) with care and without jeopardising their own safety, safety of others and of the environment
- manage various types of waste and separate waste intended for recycling

- explain the necessity of nature preservation and well-planned management of natural resources as a prerequisite for sustainable development
- explain why decisions on the development and use of certain technical solutions are often compromises between economic benefits and potential environmental risks
- come to understand that technology significantly helps prevent or mitigate the damage caused by natural disasters
- come to understand the ecological, economic and energy-saving value of proper disposal, separation and processing of waste.

III. INFORMATION AND COMMUNICATION TECHNOLOGY

1. Fundamentals of information and communication technology

Students will:

- find out that information and communication systems enable exchange of information among people, between people and machines and between machines and machines
- come to realise that the communication system consists of the source, transmission path and destination
- recognise that information has to be coded appropriately and transmitted according to agreed rules, the so-called protocols.

2. Hardware and software

Students will:

- recognise that computer components contain digital microelectronic assemblies
- evaluate computer specifications by comparison (processing speed, the number and length of registers, memory size, disk capacity, speed of transmission between individual parts of the computer etc.)
- assess the required disk size for storing multimedia contents and the necessary speed of transmission in real time.

3. Internet and network services

Students will:

- recognise the structure of the Internet and modes and speed of communication via the Internet
- evaluate the quality of contents and process contents obtained on the Internet
- explain the principles of online purchase of goods and services.

4. Preparation of computer presentations

Students will:

- using a software tool for the preparation of presentations, prepare slides with text, their own drawings and drawings and images from galleries, and audio and video recordings
- add animation effects
- prepare a presentation to be played and run it.

5. Creation of web pages

Students will:

- create simple web pages with texts and graphic contents using a software tool for web design
- launch the created web pages
- connect web pages by links.

IV. COMPUTER-BASED PROBLEM-SOLVING

1. Basis of programming

Students will:

- use programme structures for decision-making and branching in programmes
- use programming loops whereby the same series of commands is repeated until the set condition is met
- come to realise that subprogrammes may invoke other subprogrammes and that for solving specific problems it is also useful to invoke themselves.

2. Spreadsheets and databases

Students will:

- identify the basic elements of the spreadsheet layout
- edit tables (change the size of rows and columns, change character size and fonts, insert borders in tables)
- use appropriate formats of numbers
- perform spreadsheet calculations using formulas
- use tables for various applications.

3. Interdisciplinary applications

Students will:

- prepare their own programmes in which they will solve simple mathematic problems, i.e. apply knowledge acquired in mathematics class
- prepare programmes that demonstrate the application of the computer for solving simple problems in physics, chemistry, biology and other subjects.

The fourth cycle (vocational schools and grammar schools)

I. TECHNICAL CREATIVITY

1. Planning and evaluating products and services

Students will:

- come to understand that the starting point in the process of designing is to establish one's needs
- participate in the process of creating the draft design and its enhancement to the point of meeting the set minimum criteria
- explain why the set criteria cannot always be fulfilled and sometimes need to be reformulated if we are to reach a satisfactory solution
- prepare models (physical, mathematical, computer) that can help in a specific phase of design and realisation of technical facilities
- explain the necessity of a systematic, interdisciplinary approach to designing industrial products and service systems; this is an activity carried out by engineers, experts in the given technical discipline
- document the processes and procedures necessary for the use and maintenance of the system using appropriate graphic symbols and charts, and communicate them to others using information and communication technology
- test the compliance of the system with the prescribed procedures; collect and store data on the operation of the system and decide on any required improvements.

2. Fundamentals of entrepreneurship

Students will:

- come to understand that entrepreneurship may be based on the manufacturing of products or provision of services and that it can exist only if there is a demand for the product or service

- come to understand the basic steps of the production cycle: from the design of the products, procurement of production input, to the use of tools and machines in designing and assembling processed materials into the finished product
- explain how various technologies are used in a well-organised production (for mechanical, thermal and chemical processing)
- explain how various technologies can be used in the provision of services and how a production chain and production can be established in a cooperation in which every producer makes a profit
- explain the importance of promotion for the success of a specific product or service and the importance of customer support for the maintenance of the product
- explain collaborative (cooperative) relation in the chain of production: participation of small, medium-sized and big producers and craftsmen
- explain the interdependence of the proper development of production process or services and the quality: ability of people who participate in them
- come to realise that in the global competition a production or service activity may survive only provided that there is creativity and permanent adjustments of all participants to the new market circumstances.

II. THE WORLD OF TECHNICS

1. Features and basic concepts of technics

Students will:

- come to understand that scientific and technological development is almost exponential
- come to understand that in advertisements some companies impose new products, thus creating artificial needs
- come to understand that many new technologies, products and services emerge with a view to making a profit in the global market
- explain that some technologies are developed on the basis of phenomena or groups of phenomena that natural sciences have studied and described
- come to understand that some new technologies arise from well-designed and combined existing technologies
- differentiate between and come to understand that the development of new technologies, products and services starts from recognising specific human needs and that in this process, on the basis of set benchmarks, the best solution is selected in a number of possible ones
- explain the technology transfer processes as a development process.

2. Cultural, social, economic and political impacts of technology

Students will:

- explain why decisions on the development and use of a specific technology are based on a systematic analysis of its desirable and adverse effects
- come to understand that the transfer of technology from one environment into another may change the cultural, social and economic relations of the new environment
- come to understand that technologies are constantly improved and renewed so that, basically, very old technologies are successfully used even today
- come to understand that the renaissance period did not only restore culture and humanism, but also stimulated and accelerated technical development
- establish that in the period of industrial revolution generated many machines, production processes and industrial plants, and that their success was a result of the interplay between scientific approach to natural phenomena and technological solutions,
- come to understand that the contemporary information period, which started with the first mechanical devices for computing and with the invention of the transistor and microelectronic assemblies, has been characterised by close ties between science and technology.

3. Fundamentals of modern technology

Students will:

- come to understand that telemedicine, which enables emergency medical interventions in remote and inaccessible areas and remote monitoring of chronic patients, will develop due to the advances in the information and communication technology
- come to understand that agriculture is an important segment of the economy of each country and that the opportunities for engaging in agricultural production depend on the features of the region
- consider the importance of biotechnology for the development and advancement of food and pharmaceutical industry
- notice the importance of the right choice of technical solutions for setting up artificial ecosystems with a minimal negative environmental impact
- come to understand that transport systems have an important role in other technologies (e.g. production, agriculture, construction industry) and that they greatly affect other activities (tourism, healthcare system, personal and national security)
- come to understand that the quality of life in an environment depends on the existence of various technical systems and their concerted action in the given environment

4. Technology and the environment

Students will:

- explain why an environmental impact study must be conducted for any project of a higher level of complexity
- come to understand that technology is important in the process of observing the natural environment and in making decisions on different procedures based on that information
- explain that technological processes have threatened the natural balance, but the technology may also be used to reduce the adverse environmental impacts.

III. INFORMATION AND COMMUNICATION TECHNOLOGY

1. Fundamentals of information and communication technology

Students will:

- evaluate standardised forms and modes of storing digital contents with respect to the memory capacity and the speed of transmission and transformation from one form into another
- become aware of the importance of information protection and consider possible ways of protection
- name the data protection operations for turning insecure communication channels into secure ones.

2. Internet and network services

Students will:

- evaluate the quality of contents and process the contents obtained on the Internet
- critically evaluate and discuss the option of online shopping

IV. COMPUTER-BASED PROBLEM-SOLVING

1. Algorithms and data structures

Students will:

- explain the importance of algorithms in the process of problem-solving
- consider typical data structures and appertaining algorithms and recognise important algorithm properties
- select and devise algorithms for solving simple problems
- devise data objects adapted to specific problems and methods for their processing

- use the appropriate programme language for programming and examining of algorithms and for solving simple problems

2. Computer-based problem-solving

Students will:

- establish that for solving a problem one needs to select an appropriate manner of its presentation
- use appropriate manners of analysing complex problems by dividing them into subtasks that are easier to solve (for which known solutions are possible)
- select appropriate algorithms for solving subtasks
- use appropriate heuristic procedures for solving tasks that cannot be solved in any other manner (including considering of all possibilities).

3. Spreadsheets and databases

Students will:

- perform spreadsheet processing of data
- prepare various forms of graphic presentation of spreadsheet data
- read and evaluate graphic presentations of data
- use databases for systematic storing of complex data
- use query language for retrieval of data from databases.

4. Interdisciplinary applications

Students will:

- evaluate finished available programmes, taking into consideration their uses in studying of various subjects
- come to realise that computers are used in all branches of the economy, in all activities, in science and education
- come to realise that many computers are built into various technical contraptions and systems in which they measure, monitor and manage processes unfolding in them.

SUBJECT FRAMEWORK OF THE AREA: Nature and Society, Practical Work and Design, Technics, Informatics, and modules: Getting Started with the Computer, Multimedia Applications of the Computer, Programming through Playing, Basis of Programming



5. Social Sciences and Humanities Area

DESCRIPTION OF THE AREA

The purpose of the social sciences and humanities area is to contribute to the development of students as independent and responsible people, individuals and citizens, capable of understanding and critically considering the position and the role of mankind in the modern world, and actively participating in the social, cultural, economic, and political development of their own society, particularly in its democratic development.

Within the framework of the social sciences and humanities area students are concerned with personal, social, economic, political, cultural, religious, and ethic and moral issues in human life and society in various periods of time and in different places.

In the social sciences and humanities area students become acquainted with contents that contribute to the understanding of conditions in life and work in the past and the present in order to become equipped for life and work in the future. They learn about people, relationships among them, the relationship between people and the world around them, about cultural development of people, and society. They study and evaluate events from the past and the present, discuss issues related to establishing just and peaceful relations among people, social relations, international order and social and economic security. They discuss social systems, social structures, economic and political orders, European integration and the process of globalisation.

They are educated to evaluate and protect natural, material, spiritual, historical and cultural heritage of the Republic of Croatia and the national identity, as well as to evaluate and protect the European and world's cultural heritage. They are acquainted with ethical and moral values, religious and cultural tradition and value systems. This primarily refers to Christianity, as well as to other religions and non-religious views of the world – the things that make up the civilisation and ethical basis of Europe.

They study regularities in spatial relations and spatial structures and they are trained for the protection and the improvement of the environment. Students tackle the issues of identity, sexuality, protection and improvement of their own health and their life at school, in the family and in society. They also study the differences and equal rights of individuals of different sexes, cultures, races, religions and classes.

Knowledge, competences and values acquired within the social sciences and humanities area form a basis for students' responsible relationship towards themselves, others, and their surroundings. This knowledge, competences and values help students form their own identity in the period of great changes and pluralism while understanding and respecting others. This area also prepares students for active and responsible participation in social life.

EDUCATIONAL GOALS OF THE AREA

- Students will:
- acquire knowledge of social relations and phenomena and social and spatial structures, and their past and present contexts and possible future consequences
- become aware of and learn how to express their relationships with others, relations among people, relations between man and the world; social, cultural, economic and political development of mankind and society
- develop the ability to interpret social and geographical phenomena and processes on the local, regional, national and world levels
- acquire knowledge and the skill of critical judgment of the development of Croatian society and its position in the context of European integration and globalisation processes
- develop a positive approach to work and acquire knowledge, skills, competences and values required to take up roles and responsibility in personal, family and public activities, especially in advocating the development of democratic society
- develop a critical judgment of one's own social actions and acquire knowledge, skills, abilities and attitudes beneficial for the development of entrepreneurship and creativity
- develop self-esteem and confidence in one's abilities and identity and develop the ability to have a balanced approach to personal and common good

- become familiar with the fundamental religious and ethical worldviews and gain an understanding of their dependence on the historical and cultural context and the ability to express, explain and form one's own attitudes in accordance with their respective religious, ethical, moral, and cultural identity
- develop communication, organisation and social skills, develop intercultural awareness necessary to understand and accept others, especially those of a different sexual, cultural, social, racial, religious, national and ethnical affiliation
- develop the ability to identify problems and questions that need to be answered, to plan and implement research, reach corroborated conclusions, and present the results of one's own work in various ways, for various purposes and for various audiences
- develop a positive attitude to learning and the ability to use all available sources, prepare for lifelong learning and assume the responsibility for one's own learning and professional development.

EXPECTED STUDENT ACHIEVEMENTS PER EDUCATIONAL CYCLE

The first cycle

I. SOCIAL SKILLS AND METHODS OF STUDYING THE PHENOMENA IN THE SOCIAL SCIENCES AND HUMANITIES AREA

1. Various information sources: collecting, evaluating and presenting information

Students will:

- express, verbally and non-verbally, their thinking, cognitions and feelings (e.g. in speaking, writing, drawing, painting, acting etc.)
- find and present, in accordance with their age, basic facts of nature, society, culture, religion, humans and their activities in the past and the present in their local community and in Croatia (in speaking, writing, drawing, and painting, cartographic presentation, acting etc.)
- use media contents and differentiate between useful and less useful contents.

2. Learning, collaboration and problem-solving

Students will:

- learn basic communication skills necessary for learning, cooperation, everyday problem-solving (e.g. listening, dialogue, agreeing, mutual help, the acceptance of differences, peaceful resolution of conflicts etc.)
- identify what is for them the most effective way of learning and apply it
- express one's own needs and aptitudes and assess their own abilities
- explain why copying is a theft of other student's intellectual property.

3. Active and responsible participation in the life of the family, school, immediate community and society

Students will:

- explain, adopt and follow the code of conduct and show respect in relationships with peers and with adults
- identify and agree on the ways in which they can contribute to the well-being and reputation of their family, school and the community and behave in accordance with what they agreed upon.

II. INDIVIDUAL, IDENTITY, CULTURE AND SOCIETY

1. Me and my personality

Students will:

- recognise and describe some basic ideas and insight about themselves
- recognise and describe their position and role in a group and society
- recognise and describe roles of other people in their immediate environment.

2. Individual, group, culture and society

Students will:

- identify and describe different family organisations and family roles
- identify the most important natural, cultural and economic features of their environment and make the connection between those features and the way of life
- compare the life in their own environment with the life in other parts of Croatia
- identify the difference between the personal, the social and the common
- identify and describe the basic concepts of family, local community, religion, Croatia, society and culture
- identify the ways in which natural and cultural heritage in their local community, country and the world is protected, as well as the role of individuals in that sense.

III. PAST EVENTS, PEOPLE AND SOCIETY

1. Concept of change and continuity

Students will:

- compare their own living conditions with the living conditions in other environments
- describe life and habits of people in the past and compare them to the modern life and habits
- differentiate between the past, the present and the future by connecting them with some important events from their own past and the past of their families, local community, Croatia or other countries
- name and describe objects, people and events from the past, with respect to the present and specify the reasons why the changes have happened.

2. History of Croatia

Students will:

- enumerate and describe basic events and circumstances that have formed and are forming their local community and the country
- describe activities of some important people in the Croatian history
- recognise the importance of learning about Croatian history and of participating in the preservation of the heritage of the local community and the country.

IV. PEOPLE, GEOGRAPHY AND THE ENVIRONMENT

1. Social structures and geospatial systems of the town or village, local community, Croatia, Europe and the world

Students will:

- identify and explore the basic social and geographical features of their living environment
- explore, describe and explain the difference between the living and the non-living world, diversity, connections and changeability within their local community
- describe how relief, climate, water, soil and vegetation affect peoples' lives
- investigate and determine where the food they consume comes from
- study society and social groups in order to identify and explain various types of settlements, and the respective living conditions and peoples' needs
- explain the connection between human activities and environmental pollution and propose measures for environmental protection
- participate in activities that promote a responsible relationship with the environment.

2. Geospatial and temporal orientation

Students will:

- learn the skill of geospatial and temporal orientation
- learn traffic signs and explain and apply traffic rules.

V. PEOPLE, SOCIETY AND THE ECONOMY

1. The economy and entrepreneurship

Students will:

- enumerate and describe important economical activities within the local community and the country
- recognise that entrepreneurship is indispensable for maintaining and improving the quality of life and the well-being of their local community and the whole country.

2. Production and consumption

Students will:

- differentiate between needs, wishes and means
- list and describe consumer rights and responsibilities and explain the importance of a healthy choice of food, toys and other products.

3. Professional guidance

Students will:

- identify professions in their school, family and their immediate community
- identify professions in a private enterprise or a company
- make decisions regarding free time management and the choice of extracurricular activities.

VI. POLITICAL SYSTEM, CITIZENS AND HUMAN RIGHTS

1. Citizens and democracy

Students will:

- participate in the process of making joint decisions and rules vital for life in a class and school (e.g. code of ethics/conduct)
- enumerate the examples of the roles of local government
- participate in the cooperation between the school and the local community.

2. Fundamental human rights and responsibilities

Students will:

- describe what the right to human dignity means for them and recognise that this is a universal human right and is granted to everyone, irrespective of their age, sex, skin colour, health condition etc.
- specify and describe their rights and duties, as well as the rights and duties of people in their immediate surroundings, and assess their importance for everyday life.

VII. WORLDVIEWS AND PHILOSOPHY

Students will:

- recognise the importance of showing respect for other people and of understanding their religion, worldview and values
- recognise that people can have beliefs and values independent of religion
- demonstrate understanding of values such as care, solidarity, justice, equality, love
- recognise and demonstrate that views and values affect people's behaviour.

VIII. RELIGION AND ETHICS

1. Christianity (teachings and rituals, morality and values, tradition and culture)

Students will:

- retell basic Biblical events and present basic Biblical characters
- recognise and describe the main features of Christian sacraments, holidays and celebrations and the liturgical year
- by studying Biblical and other Christian texts, recognise core Christian values and norms and their importance in everyday life
- recognise important Biblical and other Christian motifs and messages found in literature, art and Croatian tradition.

2. World religions (beliefs and rituals, ethics and values, tradition and culture)

Students will:

- recognise the existence of various religious signs, symbols and practices in the modern Croatian society
- study stories, paintings, music etc. and describe the most important beliefs and rituals of world religions
- recognise the importance of religious rituals, holidays and practices in people's lives.

The second cycle

I. SOCIAL SKILLS AND METHODS OF STUDYING PHENOMENA IN THE SOCIAL SCIENCES AND HUMANITIES AREA

1. Various information sources: collecting, evaluating and presenting information

Students will:

- express, verbally and non-verbally, their thoughts, insights, feelings and attitudes (e.g. in speaking, writing, drawing, painting, acting etc.)
- find, present in a number of ways, and evaluate basic information about nature, society, culture, religion, humans and their activities in the past and the present (in speaking, writing, drawing and painting, cartographic presentation, acting)
- enumerate and describe various ways in which the same events and phenomena can be presented (science, art, media, museum exhibitions etc.)
- follow, enumerate and describe events in their social environment from various information sources and recognise basic problems in their social environment.

2. Learning, collaboration and problem-solving

Students will:

- develop, explain and apply strategies that help them learn successfully
- explain the importance of commitment, learning, work and collaboration
- master group work, discussion on simple problems and cooperation skills, as well as on communication skills and self-expression
- describe and apply communication skills that lead to non-violent resolving of conflicts.

3. Active and responsible participation in the life of the family, school, immediate community and society

Students will:

- recognise the importance of volunteering, and actively participate in social, humanitarian and cultural events in school and the immediate community
- recognise and assess factors that threaten good, just and pacifist relations in the immediate living environment
- recognise the natural phenomena, human activities and conditions that may cause distress, injuries, health problems, property damage, loss of income and disruption of social and

economic activities, as well as damage of the environment and immediate living environment and in the world.

II. INDIVIDUAL, IDENTITY, CULTURE AND SOCIETY

1. Me and my personality

Students will:

- describe and explain basic experience and insights about themselves
- explain their role and the role of other people in the wider environment.

2. Individual, group, culture and society

Students will:

- differentiate between personal identity and other identities and recognise the complex nature of identity
- discuss some important issues that affect the person and personal relationships (different ways of thinking, material and gender differences, children with special needs etc.)
- explain the basic concepts of nation, Croatia, society, culture and religion
- identify and describe societies and cultures across the world
- protect heritage and demonstrate respect of Croatia's cultural heritage and of the homeland as well as of other cultures and countries.

III. PAST EVENTS, PEOPLE AND SOCIETY

1. Concept of change and continuity

Students will:

- assess and compare their own living conditions with the living conditions at different points in the past and discuss similarities and differences among them
- use primary and secondary sources in studying the past and the present
- use adequate historical terms in describing the past periods of time, events and process
- recognise the diversity of past and present events and social phenomena and discuss why certain periods and the respective people and events have been important
- describe and compare some past and some current events and changes in their local community, Croatia, Europe and the world from a historical, geographical, cultural and economic point of view.

2. History of Croatia

Students will:

- interpret historical events from different time periods in order to gain insight into Croatian heritage and develop a sense of chronology
- enumerate and describe decisive events and circumstances that have shaped and are still shaping Croatian reality and that of its wider region
- study historic events and people and reflect on how they affected the development of Croatian society and everyday life
- locate historical events, phenomena and individuals into a certain historical period.

3. History of the peoples of Europe and the world

Students will:

- describe the development of mankind and society
- consider selected topics from the European and world history significant for understanding of modern society
- come to understand Croatian history in the context of the European and the world history

- describe and comment on different living conditions on different continents in various historical periods and compare with the living conditions in modern society; discuss similarities and differences.

IV. PEOPLE, GEOGRAPHY AND THE ENVIRONMENT

1. Social structures and geospatial systems of the town or village, local community, Croatia, Europe and the world

Students will:

- observe their environment and describe basic social and geographical features and the spatial system of their environment
- describe the most important features of landscape in Croatia and explain how economic activities have changed the landscape
- study and assess the impact of human activity on the environment and suggest ways to treat the environment more responsibly and how to reduce risks of natural catastrophes
- compare and connect housework to health, economy and environmental protection on the local and global levels
- compare their own living conditions to the living conditions in other environments
- identify and describe social and geographical features of the planet Earth.

2. Geospatial and temporal orientation

Students will:

- use geographical and historical maps of the world and individual continents and simple technical aids for geospatial orientation
- explain traffic regulations and follow them.

V. PEOPLE, SOCIETY AND THE ECONOMY

1. The economy and entrepreneurship

Students will:

- compare and explain social differences and different levels of economic development of the developed, developing and underdeveloped countries and discuss possibilities for bridging those gaps
- use the methods of recognising economic and social issues, research and suggesting their solutions
- recognise the most important characteristics of an enterprising person
- recognise and describe factors of enterprise and entrepreneurship and their importance for the community.

2. Production and consumption

Students will:

- study the effects of the food production and preparation methods and processes on its quality
- specify basic consumers' rights and responsibilities
- compare prices and identify differences between providing information on a product and advertising it.

3. Professional guidance

Students will:

- identify professions in a private enterprise or a company and recognise the role and importance of every individual for the success of the whole
- raise awareness of their self-confidence based on their own abilities, which can be used for meeting their needs and contributing to the development of the environment
- make decisions regarding free time management and the choice of extracurricular activities

VI. POLITICAL SYSTEM, CITIZENS AND HUMAN RIGHTS

1. Citizens and democracy

Students will:

- organise election in class and school and participate in them
- through participation in projects in schools and the local community, explain basic concepts of democracy
- specify and describe institutions of local government and differences between the local and national government
- explain the role and importance of the government and laws for fulfilling the needs of society, the local community and Croatia
- explain what democracy is and why citizens must and can participate in it.

2. Fundamental human rights and responsibilities

Students will:

- describe what the right to human dignity means and explain that this right belongs to all students in the class and the school, irrespective of their age, sex, skin colour, health condition, etc.
- specify and explain their rights and duties, and rights and duties of people in their immediate environment, and assess their importance in everyday life
- think of the ways to reduce the abuse of the Internet and other media, which can violate dignity and safety of people.

VII. WORLDVIEWS AND PHILOSOPHY

Students will:

- identify and discuss social values, including one's relationship to himself or herself, to others, to work, to the community, to religion and to culture
- explain the importance of showing respect for other people and understanding their religion, worldviews and values
- realise that personal value systems are based on religious or other non-religious value systems
- express open-mindedness for core values, such as justice, equality, love, solidarity, human rights
- recognise and assess how one's faith and values affect one's actions and behaviour. .

VIII. RELIGION AND ETHICS

1. Christianity (teachings and rituals, morality and values, tradition and cultures)

Students will:

- present Biblical and other Christian stories, interpret them and explain their morale
- study the life and teachings of Jesus Christ and other important Christian figures and describe key concepts in Christian religion and morality
- describe how the life and teachings of Jesus Christ and other important Christian figures have affected the universal human history
- describe basic features of certain Christian sacraments, holidays and celebrations; explain their meaning for Christians and comment on the observance of these sacraments, holidays and celebrations in Croatian society in the present and past
- recognise and describe fundamental Christian messages, symbols and motifs in Croatian customs and traditions
- recognise and describe significant Biblical and other Christian motifs found in literature and other arts.

2. World religions (beliefs and rituals, ethics and values, traditions and cultures)

Students will:

- present some of the basic stories of other religious traditions
- explore the history of world religions and describe their main teachings
- describe the role of some world religions in Croatian society and the world and present their key features historically
- explore and describe how the followers of different world religions practice their faith by praying or meditating, observing rituals and special celebrations; develop appreciation for various religious practices and traditions.

The third cycle

I. SOCIAL SKILLS AND METHODS OF STUDYING THE PHENOMENA IN THE SOCIAL SCIENCES AND HUMANITIES AREA

1. Various information sources: collecting, evaluating and presenting information

Students will:

- analyse, present in different ways and evaluate information regarding nature, society, culture, religion, people and human activities in Croatia and in Europe
- evaluate information found in the media and explain the roles of the media, in particular the role of the media in shaping people's attitudes and behaviour
- collect information on social events from various sources
- explain how some social events in the local community have been formed, taking into consideration the environment, cultural heritage, the economy, social solidarity, humanitarian work
- connect contents from social and natural sciences in solving practical issues from various areas of social and economic life.

2. Learning, collaboration and problem-solving

Students will:

- implement strategies that help them in successful and quick learning, decision-making and deduction, identify opportunities to successfully apply the knowledge from the social sciences and humanities area
- analyse and explain personal and group responsibilities in group work
- differentiate between collaborative and rival approach in problem-solving and assess the consequences of both
- learn about and practice social and communication skills: talking, reaching agreements, group work, negotiations, augmenting an attitude, and group problem-solving; use anger management techniques.

3. Active and responsible participation in the life of the family, school, immediate community and society

Students will:

- explain the importance of volunteering; actively participate in social, humanitarian and cultural events in school and the immediate community
- explain the measures for mitigating and restricting the adverse impacts of natural threats and disasters in order to create a safe environment.

II. INDIVIDUAL, IDENTITY, CULTURE AND SOCIETY

1. Me and my personality

Students will:

- express their personality and preferences, i.e., express their wishes, needs, advantages and argument one's attitudes

- become aware of their sexuality and explain the importance of relationships between people of opposite sex
- assess the impact of social groups and mass culture on the development of personal identity.

2. Individual, group, cultures and society

Students will:

- discuss important issues that affect individual and interpersonal relationships (different ways of thinking, social and gender differences, children with disabilities etc.)
- recognise and explain the role peer groups and the affinities of group members have in forming identity
- explain different types of families in modern society and how social changes have affected family life
- identify ways to preserve natural and cultural heritage in the local community, Croatia and the world and the role of an individual in the preservation of that heritage
- explain the elements of national and regional identity while respecting diversity.

III. PAST EVENTS, PEOPLE AND SOCIETY

1. Concept of change and continuity

Students will:

- explain and compare social phenomena, processes and events in the past and the present
- use various sources of information to examine events in the past and the present on individual continents in various historical periods
- explore and explain events and changes in the past and present in the local community, in Croatia and the world from the historical, geographical, cultural and economic aspects.

2. History of Croatia

Students will:

- consider and analyse topics from the Croatian history, notice the sequence of historical events, compare time periods and societies
- recognise and evaluate the impact of national minorities and European peoples on the formation of Croatian society and culture
- consider topics from the Croatian history and notice the connections with the world events
- evaluate the importance of historical events and individuals for the formation of Croatian society.

3. History of the peoples of Europe and the world

Students will:

- notice and explain the connections between social, political and cultural changes in the history of Croatia, Europe and the world
- explain and assess the forms of living conditions on individual continents in various historic periods in comparison with the living conditions in modern society and discuss the similarities and differences
- consider and present the events and social structures of the European and world history
- explain the importance of knowing other nations and other cultures for purpose of inter-cultural communication.

IV. PEOPLE, GEOGRAPHY AND THE ENVIRONMENT

1. Social structures and geospatial systems of the town or village, local community, Croatia, Europe and the world

Students will:

- study features of their environment, explain the basic social and geographical features and geospatial systems in their living environment

- explain changes in the social structure and geographical system of their local community
- explain the social and geographical features and organisation in Croatia and Europe.

2. Geospatial and temporal orientation

Students will:

- learn the skill of geospatial and temporal orientation and use geographical and historical maps of continents and Croatia and the global positioning system (GPS) device.

V. PEOPLE, SOCIETY AND THE ECONOMY

1. The economy and entrepreneurship

Students will:

- recognise factors and differentiate between types of economic systems in Croatia, Europe and the world
- describe entrepreneurial activities in the family, at school, at work and in the community
- initiate and manage their entrepreneurial projects.

2. Production and consumption

Students will:

- explain why it is necessary to include price, health and environmental considerations when making decisions about food preparation and consumption
- explain and describe basic consumer rights and responsibilities
- make calculations for managing personal finances and their own household budgets, appraise the consequences of the management of their financial resources and efficiently engage in savings opportunities.

3. Professional guidance

Students will:

- make well-argued decisions on their own education, professional and personal development
- have a responsible attitude towards their school success
- recognise their own talents and abilities in specific areas of work and creativity on the basis of their school performance and participation in school activities and in collaboration with various institutions and organisations in the local community
- specify basic requirements for starting and maintaining a business.

VI. POLITICAL SYSTEM, CITIZENS AND HUMAN RIGHTS

1. Citizens and democracy

Students will:

- describe the organisation of the local government
- recognise the basic differences between the models of democracy in the Republic of Croatia and other countries
- describe the basic objectives and roles of international organisations in the development of democratic structures and peace-keeping
- participate in different programmes with the goal of identifying, investigating and solving some minor social problems in the local community; explain and demonstrate the roles of a responsible citizen
- explain civil rights and obligations in democratic societies.

2. Fundamental human rights and responsibilities

Students will:

- identify and describe gender and social stereotypes and prejudices
- recognise ethical principles governing the fight against the Internet abuse, which threatens human dignity and safety
- identify and discuss measures to be taken in order to protect oneself from falling victim to trafficking, the Internet abuse or any other type of abuse.

VII. WORLDVIEWS AND PHILOSOPHY

Students will:

- explain the importance of understanding and respecting other people and their faith, worldviews and values, and creating an atmosphere of dialogue and tolerance
- recognise and prove the importance of values and explain the core values of the Croatian and European cultures
- name and explain basic concepts related to personal and social well-being, conscience and ethical values
- by participating in common projects and events, demonstrate that they have understood and adopted moral values.

VIII. RELIGION AND ETHICS

1. Christianity (teachings and rituals, morality and values, tradition and culture)

- Students will:
- specify and explain the basic teachings of the Christianity
- explain the impact of Christianity on Croatian society, culture, tradition, art and literature
- present basic Christian moral principles and discuss ways to achieve a more equitable, solitary and tolerant society in accordance with Christian answers to moral questions
- explain how the Gospel discusses some basic human values, such as dignity, equality, freedom, love, and human rights
- explain and critically discuss Christian eschatological teachings.

2. World religions (beliefs and rituals, ethics and values, tradition and culture)

Students will:

- explain teachings of major world religions, especially eschatological teachings, and discuss it
- examine lives and teachings of important people from world religions; explain basic beliefs of those religions
- explain teachings of major world religions and explore similarities and differences between them and one's own religion
- explain various types of rites and religious facts in world religions and what do they mean to the followers of those religions
- give examples and describe how the values of the world religions have contributed to the change in Croatian and other societies
- explain the place of religion in Croatian society and the place of religion in other modern societies.
- explain the significance of the values such as honesty, respect and solidarity and establish how those values may be applied in relation to specific ethical questions and doubts
- discuss ethical issues and support their positions with arguments.

The fourth cycle (vocational schools)

I. SOCIAL SKILLS AND METHODS OF STUDYING PHENOMENA IN THE SOCIAL SCIENCES AND HUMANITIES AREA

1. Various information sources: collecting, evaluating and presenting information

Students will:

- present analyses of considered issues in various manners (answers to questions, well-thought-out written presentations, descriptions and explanations, graphical methods etc.)
- differentiate between various approaches in interpretation of the same events and phenomena and explain the reasons for various interpretations
- systematically follow and explain social events from different sources
- connect the knowledge from social and natural and technical sciences and apply them in the respective vocational field.

2. Learning, collaboration and problem-solving

Students will:

- systematically apply their own method of successful learning and demonstrate readiness for lifelong learning and training
- realistically assess one's opportunities in identifying and solving problems; make independent well-founded decisions
- identify different options in resolving conflicts and disputes
- participate actively in effective communication in various social circumstances, taking positions, purposeful discussion and assuming responsibility for the implementation of common goals.

3. Active and responsible participation in the life of the family, school, immediate community and society

Students will:

- explain and form a judgment regarding their roles and responsibilities in the family, school and social community
- participate in the activities of the school, immediate community and society and assume responsibility for the implementation of common goals
- demonstrate responsibility and entrepreneurial spirit in tackling social issues and in social activities
- critically assess factors that threaten justice and peace in the wider community.

II. INDIVIDUAL, IDENTITY, CULTURE AND SOCIETY

1. Me and my personality

Students will:

- become aware of and express their personality in relations towards other people
- apply knowledge from psychology in order to advance personal growth and development
- critically discuss and interpret various human behaviours and explore various values and attitudes
- apply the knowledge about psychological development of an individual for a better understanding of oneself and people from one's own environment and for improving the quality of life
- analyse and discuss possibilities for lifelong learning for the purpose of personal growth and development.

2. Individual, group, culture and society

Students will:

- explain why it is important to understand and respect their heritage and their identity as citizens of Croatia, Europe and the world
- explain basic concepts and research methods in sociology and other social sciences on the examples pertaining to modern society
- explain basic social structure, institutions, social processes and relations in Croatian society
- apply the acquired knowledge in an analysis of Croatian society and carry out simple research, hold well-argued discussion, write an essay etc.
- explain the processes of European integration and globalisation and their impact on Croatian society (e.g. the economy, culture, peaceful co-existence).

III. PAST EVENTS, PEOPLE AND SOCIETY

1. Concept of change and continuity

Students will:

- assess how major social changes in the past have affected living conditions and everyday life
- consider and explain various historical events and processes and establish causes and consequences of those events and changes
- explain the historical development of society, culture, and public awareness
- explore and compare events and processes in the past, present and future in the local community, Croatia and the world from the historical, geographical, cultural and economic aspects
- explain the cultural, economic and historical determination of the local community and of the Republic of Croatia at the regional, European and world levels
- explore and explain features of specific periods and societies, and causes and consequences of events and changes; place their explanations of causes, consequences and changes in a wider context, in various countries and various periods
- explain the historical development of society, culture, and public awareness
- compare and explore the events and processes in the past, present and future and in the local community, in Croatia and the world from the historical, geographical, cultural, economic and sociological aspects
- differentiate between and interpret cultural, economic and historical determination of the local community and of the Republic of Croatia at the regional, European and world levels.

2. History of Croatia

Students will:

- evaluate cultural, economic and political impact on the development of Croatian society
- analyse and consider the main events and social structures, their causes and consequences and the trends and implementers of changes in the local community and the Croatian history
- describe and explain Croatian history in the context of the history of the neighbouring countries, Europe and the world
- present the Croatian national cultural identity in relation to cultural identities of Europe and the world.

3. History of the nations of Europe and the world

Students will:

- describe and critically interpret the main historical events and social structures, their causes and consequences
- compare trends and implementers of changes in the European and world history and explain the considered changes, events and phenomena

- enumerate and describe ways of solving international conflicts and implementing peace
- analyse and consider past events and connect the world, European and Croatian histories
- differentiate between and describe the levels of development of democracy.

IV. PEOPLE, GEOGRAPHY AND THE ENVIRONMENT

1. Social structures and geospatial systems of the town or village, local community, Croatia, Europe and the world

Students will:

- explore and discuss environmental issues and present the consequences of various procedures with respect to preservation of the environment, life and society
- describe and explain social structures in the world
- explain geospatial systems of primary, secondary and tertiary activities
- analyse and form a judgment about the issue of sustainable development and fair distribution of natural and acquired resources
- express readiness for action in the protection of the environment.

2. Geospatial and temporal orientation

Students will:

- use information and communication technology in the analysis and interpretation of cartographic and graphical presentation of geospatial structures and systems
- explain the factors of position/location and space management according to the sustainable development concept.

V. PEOPLE, SOCIETY AND THE ECONOMY

1. The economy and entrepreneurship

Students will:

- describe basic economic concepts, systems and development directions
- describe factors, organisation and functioning of the economic system in the Republic of Croatia and fiscal, banking and monetary systems of the Republic of Croatia and the European Union, as well as the capital market
- describe and explain the basic concepts of entrepreneurship
- in cooperation with technological research and development centres and with cultural, business, administrative and civil organisations in Croatia and Europe organise projects and assess whether the selected vocational area provides opportunities for the development of their competences.

2. Production and consumption

Students will:

- explain the interdependence of various parts of the world and assess the impact of globalisation on producers, consumers and the environment
- use arguments and examples to illustrate the importance of consumer awareness and resistance to advertising manipulations
- explain ways to protect their consumer rights, health and money, as well as the environment
- explain why and how one should save
- explain why work ethics is a basic social value
- explain why a part of the revenue from sales of goods and services is set aside for common social needs and explain the consequences of tax fraud.

3. Professional guidance

Students will:

- explore and explain possibilities for continuing their education and further training
- recognise their talents and aptitudes in specific areas of work and creativity on the basis of school performance and participation in school activities and collaboration with various institutions and organisations in the local community, Croatia and Europe
- responsibly use their knowledge, competences and skills for professional development.

VI. POLITICAL SYSTEM, CITIZENS AND HUMAN RIGHTS

1. Citizens and democracy

Students will:

- describe basic concepts of politics and political systems
- explain the key concepts of democracy: government, privacy, justice and responsibility; apply knowledge in school projects and the projects in the local community
- describe the concept of the rule of law; explain how laws and the Constitution of the Republic of Croatia are instrumental in solving social and economic issues and increasing the level of democracy
- describe the activity of international and European organisations, particularly the structure of the European Union, its main objectives and values, as well as the European cultural diversity
- assess and express personal and group strengths and personal and group weaknesses
- discuss and demonstrate by example and action some of the civil responsibilities in democratic societies (volunteer work, projects in the school and in the local community, activities showing solidarity, charity and humanitarian work etc.)
- discuss and interpret why corruption is harmful for society
- explain why a positive attitude to work, creativity and entrepreneurship is an essential element of modern democracies.

2. Fundamental human rights and responsibilities

Students will:

- interpret human rights, obligations, freedoms and equality as the basis for solidarity and responsibility in modern democratic societies
- express the awareness of personal and common responsibility
- explain the concept of minority rights
- specify possibilities of overcoming gender-based and social stereotypes and prejudices.

VII. WORLDVIEWS AND PHILOSOPHY

Students will:

- discuss why it is important to show respect for other people and to understand their religion, worldviews and values
- identify and present religious and non-religious worldviews that make civilisation and ethical groundwork of Europe
- explain how various religious and non-religious worldviews may bring about social changes
- in keeping with their age, discuss issues plaguing modern civilisation and offer their ideas for solving them
- identify and name a range of scientific and practical views of reality and one's role in affecting the reality.

VIII. RELIGION AND ETHICS

1. Christianity (teachings and rituals, morality and values, tradition and cultures)

Students will:

- present and discuss the pillars of Christian faith and the life of the Christian Church and its followers
- explain the impact of Christianity on the world, European and Croatian culture, tradition, art and literature
- explain how Christian values help clarify and tackle some issues and challenges of modern society
- decide on their reaction to some of the challenges and opportunities presented by modern religious and cultural diversity on the level of Croatia, Europe and the world.

2. World religions (beliefs and rites, ethics and values, tradition and culture)

Students will:

- examine various moral issues and study how major world religions respond to those issues; use those insights to help them form their own system of values
- explore traditions, rituals and practices of major world religions; discuss the place of those religions in modern life
- describe and explain the basic symbols, rituals and beliefs in major world religions.

The fourth cycle (grammar schools)

I. SOCIAL SKILLS AND METHODS OF STUDYING PHENOMENA IN THE SOCIAL SCIENCES AND HUMANITIES AREA

1. Various information sources: collecting, evaluating and presenting information

Students will:

- select, organise and use diverse relevant information in presentation and analysis of a topic in various forms (answers to questions, well-thought-out writing, description and explanation, graphical methods etc.)
- identify different approaches in the interpretation of the same event or phenomenon, explain the reasons for various interpretations, and evaluate those interpretations
- systematically study, compare and explain social events using different information sources
- apply methods of hypothetical thinking by considering possible scenarios and truths and their potential consequences
- use genetic analysis in studying origins of various ideas in order to better understand their contemporary implications.

2. Learning, collaboration and problem-solving

Students will:

- systematically use their learning strategies and demonstrate readiness for lifelong learning and training
- creatively use acquired knowledge from the social sciences and humanities area, explore past and present social phenomena and in this process create their own well-formed judgments and assessments
- establish different ways of dispute management and resolution
- participate actively in effective communication in a range of social situations; learn to take a position on an issue, participate in a constructive discussion and take responsibility for the achievement of common goals.

3. Active and responsible participation in the life of the family, school, immediate community and society

Students will:

- explain and form an opinion of their roles and responsibilities in their family, the school and the community
- get involved in the activities in the school, the immediate community and society and take responsibility for the achievement of common goals
- demonstrate responsibility and initiative in tackling social issues and participation in social life
- critically assess the factors that jeopardize fair and amicable relationships between people in the wider community.

II. THE INDIVIDUAL, IDENTITY, CULTURE AND SOCIETY

1. Me and my personality

Students will:

- describe and explain the core concepts, terms, approaches, theories and research in the area of psychology
- use the knowledge regarding psychological development of an individual to better understand themselves and other people and to improve the quality of life
- apply the acquired knowledge from the area of psychology to critically discuss and explain different human behaviours and explore different sets of values and attitudes
- recognise and explain their abilities, values and aptitudes in order to make a good career choice
- describe how people are driven to act, gain a better understanding of their own and other people's behaviour and explain the importance of intrinsic motivation.

2. Individual, group, cultures and society

Students will:

- explain why it is important to know and appreciate one's heritage and one's identity as a citizen of Croatia, Europe and the world and explain why it is important to respect the heritage and the identity of others
- explain basic theoretical approaches and concepts and research methods of sociology and social sciences by using the examples of modern society
- explain the basic social structure, institutions, social processes and relations in Croatian society
- apply the acquired theoretical knowledge in an analysis of Croatian society by carrying out simple research, having a well-argued discussion, writing an essay etc.
- explain the processes related to European integration and globalisation and their impact on Croatian society
- compare and evaluate the following relations: local – global, traditional – modern and post-modern, majority – minority, spiritual – material, Croatian identity – multiculturalism.

III. PAST EVENTS, PEOPLE AND SOCIETY

1. Concept of change and continuity

Students will:

- explore and explain the features of specific periods and societies, and causes and consequences of events and changes; they should put their explanations of causes, consequences and changes in a wider context, in various countries and various periods
- explain the development of society, of culture, awareness of people in the past and present
- compare and explore the events and processes in the past, present and future and in the local community, in Croatia and the world from the historical, geographical, cultural, economic and sociological aspects

- differentiate among and interpret the cultural, economic and historical determination of the local community and of the Republic of Croatia in the context of the region, Europe and the world.

2. History of Croatia

Students will:

- assess the importance of cultural, economic and political impacts on the development of Croatian society
- present and critically interpret the main events and social structures, their causes and consequences, trends and agents of change in the local community and the Croatian history; explain these issues from the position of different stakeholders
- describe and critically view Croatian history in the context of the history of the neighbouring countries and that of Europe and the world
- present Croatian national and cultural identity in the context of European and the global cultural identities
- differentiate among, present and explain various interpretations of past and present events and social phenomena and processes in the Croatian history
- reach a well-argued decision on the values significant for the development of Croatian society.

3. History of the peoples of Europe and the world

Students will:

- describe and critically interpret the main past events and social structures, causes and consequences of their development and the trends and implementers of change in the European and the world history, interpreting the observed changes, events and phenomena from the position of a number of stakeholders
- enumerate and interpret the attempts at solving international conflicts and implement peace and present their conclusions regarding the success of those attempts
- discuss past events and their role in the European, world and Croatian history
- describe, analyse and juxtapose different interpretations of past and present events and social phenomena and processes, and make arguments as to their validity
- differentiate among and describe the degrees of the development of democracy
- describe, differentiate among and explain causes of the various degrees of the development of democracy.

IV. PEOPLE, GEOGRAPHY AND THE ENVIRONMENT

1. Social structures and geospatial systems of a town or village, local community, Croatia, Europe and the world

Students will:

- explore and discuss environmental issues and present consequences of various procedures with respect to the protection of the environment, life, and society
- explore and explain social structures in the world
- explain the connection between geospatial systems and economic activities
- analyse the issue of sustainable development and equitable distribution of natural resources and processed goods and express readiness for action in the protection of the environment
- use various sources and methods in collection and interpretation of information regarding social structures and geography-based economic processes, and explain and graphically present the results of the research
- analyse and interpret the process of modernisation of Croatian society in the context of European integration and globalisation and how this process affects the individual
- identify and discuss contemporary events in the Republic of Croatia, Europe, and the world; discuss the position and the role of Croatia in relation to the European Union and major international organisations

- present and evaluate the impact of socio-economic development on the individual and identify its positive and adverse effects on the environment.

2. Geospatial and temporal orientation

Students will:

- use information and communication technology in the preparation, analysis and interpretation of cartographic and graphic presentations of the geospatial structures and geospatial systems
- learn about the relevance of geography/location and the proper management of the environment in keeping with the sustainable development concept.

V. PEOPLE, SOCIETY AND THE ECONOMY

1. The economy and entrepreneurship

Students will:

- describe the basic economic concepts, systems, and courses of economic development
- describe factors, structures and mechanisms of the economic system in the Republic of Croatia; describe fiscal, banking, and monetary systems of the Republic of Croatia and the European Union; describe the capital market
- describe and explain the basic concepts of entrepreneurship
- compare economic activities in various areas and regions and explain how natural environment affects human activities
- launch entrepreneurial projects in cooperation with Croatian and EU research and development, cultural, business, administrative, and civil organisations and institutions

2. Production and consumption

Students will:

- study globalisation processes in order to explain the interdependence of various parts of the world and assess the impact globalisation has had on suppliers, consumers, and the environment
- use arguments and examples to illustrate the importance of consumer awareness and resistance to advertising manipulations
- explain ways in which they can protect their consumer rights, health and money, as well as the environment
- explain why and how one should save
- explain why work ethics is a basic social value
- explain why a part of the revenue from sales of goods and services is set aside for common social needs and explain the consequences of tax fraud.

3. Professional guidance

Students will:

- explore and explain possibilities for continuing their education and further training
- recognise their talents and aptitudes in specific areas of work and creativity on the basis of school performance and participation in school activities and collaboration with various institutions and organisations in the local community, Croatia, and Europe.

VI. POLITICAL SYSTEM, CITIZENS AND HUMAN RIGHTS

1. Citizens and democracy

Students will:

- describe and interpret basic concepts of politics and political systems
- explain the key concepts of democracy: government, privacy, justice and responsibility; apply knowledge in school projects and the projects in the local community

- describe the concept of the rule of law; explain how laws and the Constitution of the Republic of Croatia are instrumental in solving social and economic issues and increasing the level of democracy
- describe the activity of international and European organisations, particularly the structure of the European Union, its main objectives and values, as well as the European cultural diversity
- assess and express personal and group strengths and personal and group weaknesses
- discuss and explain why corruption is harmful for society
- explain why a positive attitude to work, creativity, and entrepreneurship is an essential element of modern democracies
- discuss and demonstrate by example and action some of the civil responsibilities in democratic societies (volunteer work, projects in the school and in the local community, activities showing solidarity, charity and humanitarian work, etc.).

2. Fundamental human rights and responsibilities

Students will:

- interpret human rights, obligations, freedoms, and equality as the basis for solidarity and responsibility in modern democratic societies
- describe and give examples of the development of human rights from an ethical standpoint
- explain the concept of minority rights
- describe the awareness of personal and common responsibility for participation in the society
- specify possibilities of overcoming gender-based and social stereotypes and prejudices.

VII. WORLDVIEWS AND PHILOSOPHY

Students will:

- specify and explain the basic philosophical terminology and philosophical disciplines
- specify, describe and compare periods in the history of philosophy, different schools of thought, and philosophers
- identify and discuss various ethical and existential issues and understand how they are a result of their respective times and cultures
- identify and present religious and non-religious worldviews that make civilisation and ethical groundwork of Europe
- explain how different religious and non-religious worldviews tackle a number of ethical problems/dilemmas
- critically assess the fundamental existential and ethical worldviews and determine/build personal attitudes
- discuss the ultimate questions of the purpose of human existence and the history of the world
- use the theoretical knowledge in philosophy to understand and explain ramifications of certain philosophical thoughts and theories, as well as those of certain choices
- specify and explain key concepts of logic
- apply basic logic in examining the properties of thought
- apply acquired knowledge in philosophy in critical consideration of their own everyday experience and activity
- identify and name a range of scientific and practical views of reality and one's role in affecting the reality.

VIII. RELIGION AND ETHICS

1. Christianity (teachings and rituals, morality and values, tradition and cultures)

Students will:

- present and discuss the pillars of Christian faith and the life of the Christian Church and its followers

- learn about and form an opinion on the basic principles of Christian morality and how it tackles some of the modern ethical doubts
- learn about and form an opinion on the impact of Christianity on the world, European and Croatian culture, tradition, art and literature
- explain how Christian values help clarify and tackle some issues and challenges of modern society
- decide on their reaction to some of the challenges and opportunities presented by modern religious and cultural diversity on the level of Croatia, Europe and the world.

2. World religion (beliefs and rituals, ethics and values, tradition and cultures)

Students will:

- examine various moral issues and study how major world religions respond to those issues; use those insights to help them form their own system of values
- explore traditions, rituals and practices of major world religions; discuss the place of those religions in modern life
- describe and explain basic symbols, rituals, beliefs of major religions
- explain how fundamental values and beliefs of major world religions have affected development of Croatian society
- decide on their own response to the challenges and opportunities presented by religious and cultural diversity in Croatia, Europe and the world.

SUBJECT FRAMEWORK OF THE AREA: Nature and Society, History, Geography, Civil Education, Psychology, Sociology, Philosophy, Logic, Religion or Ethics (students choose one or the other); and modules: Civil Education (integrated across subjects), Production and Consumption (integrated across subjects), Professional Guidance and Lifelong Learning (integrated across subjects), Citizen and Entrepreneurship (integrated across subjects), Applied Psychology (integrated across subjects).



6. Art Area

DESCRIPTION OF THE AREA

The purpose of the art area is to improve students' understanding of art and their active response to art by participation. Students will learn to see and understand themselves and the world through works of art, as well as how to use art to express their feelings, experiences, ideas and attitudes.

The art educational area consists of Visual Arts and Design, Musical Culture and Art, Film and Media Culture and Art, Dramatic Culture and Art, and Art of Movement and Dance.

Art enriches personal experience and understanding of the world; it helps form opinions, attitudes and worldviews; it heightens one's sensitivities, adds to recollection of one's past, increases critical awareness, and opens doors into different worlds.

Art encourages introspection and pondering and catharsis, it allows for intertwining and expressing ideas, emotions and experiences in a painting, piece of music, film, piece of writing, movement or dance.

The creative process of art is greatly beneficial to the child's harmonious development; it stimulates all types of intelligence, as well as creative and symbolical thinking, practical skills, and personality. It also encourages self-confidence, perseverance, self-discipline, spontaneity and inquisitiveness; it develops attentiveness, concentration, sensitivity to proportions and cyclical nature of life and fosters the ability of self-expression and critical thinking.

Works of art and creative activities play a role in forming identity, strengthening integrity and self-respect and raising cultural and environmental awareness. Education for art and through art renders creative individuals who participate in the cultural life of their local and wider communities.

Art in education contributes to intellectual, sensory, emotional, social, physical, spiritual and creative development of students: art helps students bring together the knowledge, insights and experiences from other educational areas and integrate them into wider social and cultural value systems and worldviews.

By learning through art, by becoming familiar with and using various sources of data, artistic languages, technological procedures, manners of expression and communication technologies, producing their own art, participating in art activities, responding to creative and artistic pieces of other students, a student becomes more open to new communication paths, new ideas, people and cultures.

Education through art and for art contributes significantly to the formation of personal and social cultural beliefs and worldviews; it is an important element of personal, social, national and European cultural identity; it promotes the adoption of universal human values, appreciation of differences among people and cultures and the development of empathy, team spirit, solidarity and personal, social and cultural responsibility.

The area of art raises students' awareness of culture and cultural events in a wider social community; it helps students understand and preserve cultural heritage, both in the sense of preserving actual works of art, and in the sense of preserving traditional culture and art; it promotes a responsible attitude to nature and its resources and creativity in everyday life. It is interrelated with other educational areas, while acquired knowledge and skills and understanding of art languages prepares students for an efficient day-to-day public, business and private communication, as well as for lifelong learning and successful participation on the labour market.

Art educational area is divided into six fields. Five of these fields deal with individual types of artistic expression and students artistic creations, and the first one is comprehensive and it covers all common and complementary educational activities in the fields covered by this educational area. In accordance with general achievements specified for the first field and with general goals of the educational area, students' achievements in all other fields are further elaborated in terms of the particularities of artistic expression that they pertain to.

EDUCATIONAL GOALS OF THE AREA

Students will:

- develop an interest in visual arts, music, film, media art, rhetoric, drama, and dance; gain an aesthetic experience and sensitivity; and form a critical attitude to art
- acquire basic knowledge of and a positive attitude to Croatian culture and other cultures, as well as to cultural and natural heritage and universal human values
- learn about and evaluate works of art from various stylistic periods
- observe the course of development of artistic expression in the context of historical and scientific developments and the development of philosophical thought
- acquire basic literacy in all areas of art
- develop communication skills through artistic expression
- express and form ideas, feelings, perceptions, and experiences in all artistic areas and forms, and in doing so feel the pleasure arising from creation
- learn about, use and evaluate various sources of data, media, technological procedures, and expression modes for the creation and presentation of artistic expression
- explore various materials, means and contents of artistic expression
- acquire an understanding of and the sense of personal responsibility for the creative process and be able to critically assess their own works and works of others
- develop self-respect, self-confidence, and awareness of their own competences and opportunities for their development through creative activities
- develop perceptiveness using senses, concentration, aptitudes, curiosity, spontaneity, individuality, and social skills and, on the basis of that, develop individuality and originality, and a desire for lifelong learning
- develop generally applicable practical skills and work ethics through individual and group artistic and creative activities
- develop empathy and the ability to work in team through common activities and creative work with other students, particularly those with special needs
- develop a positive attitude to and appreciation for aesthetics and culture of living and participate actively in the cultural life of the community.

EXPECTED STUDENT ACHIEVEMENTS PER EDUCATIONAL CYCLE

The first cycle

I. ACTIVE OBSERVATION AND UNDERSTANDING OF THE WORLD OF ART AND PARTICIPATION IN ART EDUCATION AND ARTISTIC CREATION

1. Observing and experiencing artistic creation and activities and their aesthetic value (perception and reception)

Students will:

- open all their senses to artistic creation and activities and interpret received messages
- identify and describe basic elements of artistic expression and aesthetic values in forms of artistic creation appropriate for children's age and in their immediate surroundings
- describe in simple words their experience of artistic creation and activities.

2. Participation in artistic creation and activities (creation or production; performance or reproduction)

Students will:

- express their own feelings, experiences, attitudes and beliefs in appropriate art activities
- identify simple elements and procedures of creative design (repetition and contrast)
- do simple creative tasks, individually or in groups
- feel pleasure and express joy of participating in artistic activities and creation.

3. Communication, socialisation and collaboration through art, design and media

Students will:

- build confidence and take responsibility in common artistic activities and creative work and in individual and group public performances, appearances and exhibitions
- express a positive attitude to artistic activities, creation and performances, and to achievements of other students
- learn to accept, work and sympathise with peers, especially those with special needs
- make their artistic activity and creation relevant to their experience and the experience of others.

4. Understanding and appreciating artistic creation and activities

Students will:

- express their like or dislike of an artistic work or activity and explain it
- express a positive attitude to artistic creation and activities.

II. VISUAL ARTS AND DESIGN

1. Observing, experiencing and naming visual elements and compositional relations

Students will:

- open all their senses to visual creation and activities and interpret received messages
- identify and differentiate between basic visual elements and their variants in artistic expression in works of art appropriate for children's age, as well as in natural and mankind-made creations
- in simple language, describe a work of art and their experience of it.

2. Developing skills and mastering visual art techniques

Students will:

- use fine motor skills and complex hand movements necessary for designing two-dimensional and three-dimensional works and designs
- observe and name the familiar visual art techniques
- with confidence apply basic skills and knowledge of visual art techniques in individual work
- individually or in group, apply acquired knowledge, skills and procedures of visual and creative design
- feel pleasure and express joy of participating in visual art creation.

3. Creation and expression in the visual art language

Students will:

- actively observe, and with confidence participate in, visual art creation and apply visual elements in their expression
- integrate different elements of visual art (point, line, colour, surface, mass/volume) and vary their size, position, direction, number and density in two-dimensional and three-dimensional space
- differentiate between basic areas and types of visual art creation, two-dimensional and three-dimensional design, drawing, painting, basis of graphic art) and elements of visual artworks (contrast, rhythm)
- recognise elements of visual art in various visual art media (drawing, painting, graphic art, sculpture, architecture, video, film, photography)
- show creative competence in solving a simple visual art problem and decision-making skill through planning, elaboration and evaluation in the performance of tasks
- feel joy and pleasure arising from visual expression and participation in visual art activities.

4. Consideration of visual art and design and evaluation of students' works

Students will:

- in simple words express their like or dislike of a particular work of visual art, explain why they find some forms of artistic creation unusual, say if they do or do not feel joy, and which works they would put up at a big exhibition
- express a positive attitude to art and cultural heritage.

5. Communication and socialisation through visual arts, design and visual art creation

Students will:

- express their feelings, experience, attitudes and beliefs in appropriate visual forms
- acquire confidence and feel responsibility in common visual art activities and creative work and in exhibitions of children's works
- express a positive attitude to visual creation and the creation in the works of other students
- describe their experience of selected works of visual art and design
- learn to accept, work and sympathise with peers, especially those with special needs
- make their visual art activities and creation relevant to their experience and the experience of others

III. MUSICAL CULTURE AND ART

1. Observing, experiencing and accepting musical art and musical creation (perception and reception)

Students will:

- observe, notice and appreciate artistic beauty and value in their natural surroundings and
- musical work and gradually expand the scope of their perception and experience
- express their feelings, experiences and attitudes in a syncretic and comprehensive manner by using diverse art forms and creative processes
- practice concentration and memory while listening to music
- describe their own experience of musical works
- acquire basis for developing a positive attitude to musical art.

2. Acquiring knowledge of elements of musical art and creation

Students will:

- differentiate between basic elements of musical ability (dynamics, tempo, pitch, timbre)
- recognize repeating and contrasting themes in music
- recognize and reproduce simple rhythmic patterns
- familiarize themselves with the language of music by singing and playing music
- become familiar with musical instruments in terms of their timbre and appearance.

3. Participating in musical activities and self-expressing through music

Students will:

- express themselves creatively (vocally, physically, visually, and digitally)
- express their ideas, feelings and experiences through music
- individually or in groups, perform simple music tasks
- acquire basic musical literacy
- experience pleasure and joy at participating in musical activities and creation
- increase self-esteem and practice self-control in musical activities.

4. Communication, socialisation and collaboration through musical experience and expression

Students will:

- work together with other students, including students with special needs and developmental disabilities
- learn how to share responsibility and practice perseverance
- practice loyalty, unity and tolerance.

5. Understanding and appreciating music

Students will:

- describe their experience of musical works and compare it to that of other students
- recognize and appreciate artistic beauty and value in musical works
- practice self-criticism with respect to their musical works and performance
- hone assertiveness and constructive criticism in evaluating their own and other people's work.

IV. FILM AND MEDIA CULTURE AND ART

1. Observing, experiencing and accepting elements of film and media creation

Students will:

- open all their senses to film creation and media activities and interpret received messages
- describe in simple terms their own experience and contents of film creation and media activities
- recognise main aesthetic and ethical values in film creation and media activities.

2. Acquiring knowledge of elements of film language and media activities

Students will:

- differentiate between film and other media
- name basic film genres and types
- differentiate between basic forms of film narration and documentary techniques.

3. Participation in media activities and film creation

Students will:

- with confidence participate in media activities and creation
- explore real-life themes through media activities and creation
- experience pleasure and joy at participating in media activities and creation.

4. Communication, socialisation and collaboration through media activities and creation

Students will:

- increase confidence through group work and individual and group public presentations
- identify advantages and disadvantages of media and film communication and creation
- learn to accept, work and sympathise with peers, especially those with special needs
- make their media activities and creation relevant to their experience and the experience of others
- learn the code of conduct regarding watching and participating in media activities and creation.

5. Understanding and appreciating film creation and media activities

Students will:

- use appropriate language to express their like or dislike of film creation or media activity
- express positive attitude to film creation and media activities.

V. DRAMATIC CULTURE AND ART

1. Observing, experiencing and accepting theatre

Students will:

- open all their senses to theatre and interpret received messages
- describe in simple terms their experience of dramatic works and their stories
- recognise basic aesthetic and ethical values of theatre.

2. Participation in theatre

Students will:

- with a feeling of confidence, participate in theatre
- express their feelings, attitudes and beliefs through fictional dramatic stories and characters
- explore real-life problems by engrossing themselves in the fictional world of theatre
- experience joy and pleasure at participating in role-plays.

3. Acquiring knowledge of elements of theatre

Students will:

- recognise and accept fictional nature of theatre
- actively and with feeling of confidence participate in theatre
- use various elements of dramatic expression (voice and speech, gestures and mimic, body movement etc.)
- differentiate between basic forms of theatre (instruction, experiment, performance, show) and elements of plays (story, plot, scenes, characters)
- recognise different media for drama (theatre, film, literature etc.).

4. Communication, socialisation and collaboration through theatrical activities and creation

Students will:

- increase confidence through group work and individual and group public appearances and performances
- recognise advantages and disadvantages of emotional engagement in interpersonal relationships
- acquire a positive attitude to dramatic works and performances of other students
- learn to accept, work and sympathise with peers, especially those with special needs
- make their theatrical activities relevant to their experience and the experience of others
- learn the code of conduct regarding watching and participating in media activities and creation.

5. Understanding and appreciating theatre

Students will:

- express in simple words their like or dislike of a play or theatrical activity
- express a positive attitude to drama and theatre..

VI. ART OF MOVEMENT AND DANCE

1. Observing, experiencing and accepting dance

Students will:

- open all their senses to dance performances
- notice repetition and contrast with respect to space, time, intensity and flow of the movement
- learn how to describe in simple words their experience of a dance performance
- observe differences in types of dancing expressions
- demonstrate a positive attitude to the art of dance.

2. Acquiring knowledge of elements and structure of movement and dance

Students will:

- identify basic dance elements in a short dance performance
- recognise and reproduce basic movement patterns in short dance sequences
- recognise and reproduce basic elements of movement
- recognise and reproduce simple rhythmic patterns
- demonstrate kinaesthetic sensibility and appreciation of the body as a means of artistic expression by learning the right body posture, simple positions of body balance and smooth transition into a different position
- connect elements into movement phrases.

3. Self-expression through dance creation and performance

Students will:

- explore and communicate their own ideas, feelings and experience in movement
- improvise movements, using a wide array of stimuli
- choose and use in a structured way the basic elements of space, intensity of movement, rhythm and the body in improvising and forming a phrase of movement
- use repetition and contrast as basic elements of choreographic process
- independently transpose an idea into movement
- feel pleasure of learning independent and group dance performance
- be motivated for preparing, practicing and making a short dance performance.

4. Communication, socialisation and collaboration through dance

Students will:

- express and communicate their own ideas and feelings in the course of creation of dance performances
- collaborate and adapt to others in the course of creation of a dance performance and provide support to peers with special needs
- communicate with a partner through movement
- watch dance performances of other students with appreciation and interest.

5. Understanding and appreciating dance

Students will:

- demonstrate appreciation for aesthetic and ethical values of dancing expression on selected dance performances
- express a positive attitude in evaluating their own and others' dance performance
- express a positive attitude to the body as the instrument of dance expression
- become familiar with the local dance artists and their work.

The second cycle

I. ACTIVE OBSERVATION AND UNDERSTANDING OF THE WORLD OF ART AND PARTICIPATION IN

ART EDUCATION AND ARTISTIC CREATION

1. Observing and experiencing artistic creation and activities and their aesthetic value (perception and reception)

Students will:

- identify aesthetic and ethical values and themes in appropriate works of art, in their own and others' creative work, as well as in their surroundings
- compare the new art experience with the existing art and general knowledge and experiences

- acquire a positive attitude to art, their own artistic creation, as well as that of other students
- know how to describe their experience of art.

2. Participation in artistic creation and activities (creation or production; performance or reproduction)

Students will:

- express their own feelings, experiences, attitudes and beliefs in a syncretic and comprehensive way in appropriate art forms and creative processes
- master basic elements of the artistic expression they engage in
- apply acquired competences, knowledge and skills in their creative expression
- individually or in a group make public exhibitions or performances
- experience joy of participating in individual and group artistic creation.

3. Communication, socialisation and collaboration through art, design and media

Students will:

- collaborate with others, share and accept responsibility in group art activities, performances and exhibitions
- develop positive and cooperative relations with other members of the group and with their audience
- foster team spirit and empathy with all the peers, especially those with special needs and developmental disabilities
- readily demonstrate their work, perception and experience.

4. Understanding and appreciating artistic creation and activities

Students will:

- explain, orally or in writing, why they like or dislike a certain work
- express, orally or in writing, their opinion on a work that they either experienced or participated in creating
- find links between their knowledge and experience of art with their knowledge in other educational areas
- find links between their knowledge and experience of art with their general life experience and that of others
- acquire a constructive critical attitude to all kinds of art
- nurture a positive attitude to artistic and traditional heritage
- acquire a constructive critical attitude to Croatian artistic heritage, as well as that of other nations and communities.

II. VISUAL ART AND DESIGN

1. Observing, experiencing and naming visual elements and compositional relations

Students will:

- recognise, differentiate between, name and compare specific visual art elements and basic compositional relations in two-dimensional and three-dimensional visual artwork, children's artwork and their surroundings
- observe, remember and describe in simple words basic properties of works of visual art, their own artwork and artwork of other students, as well as notice harmonious visual patterns in nature
- develop aesthetic sensibility to visual artwork and natural and man-made environment
- recognise specific aesthetic values in the observed piece of work of art, artwork or surroundings
- verbalize their aesthetic experience of a piece of artwork.

2. Developing skills and mastering visual art techniques

Students will:

- use fine motor skills and complex hand movements necessary for designing two-dimensional and three-dimensional works and designs
- while doing an assigned task in visual art or design, or using those forms of art freely, apply acquired knowledge in two-dimensional and three-dimensional visual art techniques
- confidently apply skills in independent work in specific visual art techniques in two-dimensional and three-dimensional areas of work
- copy and simplify certain forms of traditional arts and crafts in design tasks
- acquire useful permanent skills and practical knowledge.

3. Creation and expression in the visual art language

Students will:

- use visual art elements and apply appropriate skills and visual art techniques to express feelings, experience, ideas and attitudes in two-dimensional and three-dimensional forms of visual art and design
- in their personal visual art expression apply, connect and combine gained understanding of visual art and design principles
- express creative competence and decision-making skills in solving a moderately complex visual art problem and apply it in creating a visual artwork or carrying out a design assignment
- explore two-dimensional and three-dimensional art and design techniques and thus experience the joy of creation and build self-awareness, confidence and independence
- in solving visual art problems, practice and demonstrate concentration, fine visual art perception and memory
- in solving visual art problems and in creating visual artwork, demonstrate perseverance and consistency
- with a mentor, restore a part of the process of creation (reconstruction) of a work of art.

4. Consideration of visual art and design and evaluation of students' visual artworks

Students will:

- apply appropriate visual art language (terminology) in „reading“ works of art, or specific elements or relations in the area of painting, sculpture, architecture or design
- demonstrate and verbalize interest in and appreciation of the values of the Croatian culture and cultures of other nations, including museums and galleries
- recognise specific aesthetic qualities of a work of visual art, or in the surroundings
- in their own artwork incorporate concern for their immediate and wider surroundings, both urban and natural
- partially independently apply the standard evaluation criteria in the evaluation of their own visual artworks and visual artworks of other students
- in the evaluation of visual artworks, demonstrate self-criticism, assertiveness and constructive criticism.

5. Communication and socialisation through visual art, design and visual art creation

Students will:

- express and share feelings, experience, ideas and attitudes using the assigned visual art elements
- communicate using visual elements of expression: shape their visual message and interpret the general visual message of other „senders“
- on a basic level, use multimedia and ICT to express and develop a certain idea
- work in teams and learn to share and take responsibility in independent or group work

- present their artwork in a class or school exhibition and provide a simple description and interpretation of it
- experience joy at participating in visual art activities, creating their own visual artwork and enjoying the artworks of others
- by learning about visual art and design, including traditional art, build closer ties with the Croatian culture and develop appreciation of other cultures and traditions.

III. MUSICAL CULTURE AND ART

1. Observing, experiencing and accepting musical art and musical creation (perception and reception)

Students will:

- express and describe their feelings, experience, thoughts and attitudes after listening to a piece of music
- listen to music and explore and compare themes and motifs
- demonstrate concentration and memory while listening to and analyzing music
- make note of and accept different personal experience of different types of music

Acquiring knowledge of elements of musical art and creation

Students will:

- differentiate between and recognise basic elements of music expression and connect them in one unit
- compare, differentiate between and describe music units that are repetitive and those that are in contrast with one another
- recognise and name various types of music (traditional, popular and classical)
- notice and express assigned rhythm and melody patterns
- develop intonation competences by singing
- recognise and name musical instruments by sound and appearance.

3. Participating in musical activities and self-expressing through music

Students will:

- improve the skills they need to express themselves creatively (vocally, physically, visually, and digitally)
- apply the knowledge about the elements of musical art by integrating technical and practical skills
- express their own ideas, thoughts and feelings in simple rhythmic and melodic improvisations
- individually or in a group, perform simple pieces of music and experience the joy of participation in musical activities and creation
- recognise, compare and try out various techniques when studying a piece of music or while writing or performing it
- increase confidence by engaging in different musical activities.

4. Communication, socialisation and collaboration through musical experience and expression

Students will:

- recognise various roles of music and assess its role in everyday life and in the life of the wider community
- express and develop a specific idea by means of multimedia and ICT
- collaborate, particularly with peers with special needs
- learn to share responsibility in group performances and activities
- communicate and share artistic impression and experience with others

- become familiar and learn to respect their own tradition and culture; explore them and compare them with other traditions and cultures

5. Understanding and appreciating music

Students will:

- describe their experience of and attitude to musical works whose performance they listened to live or recorded, or a piece of music they read or listened to using (information and communication) technology
- describe, critically analyse and evaluate expressive quality of works of art, on the level appropriate for their age
- improve their own musical ability and respect the direction and the trajectory of others' musical development
- demonstrate self-criticism in both musical creation (production) and musical performance (reproduction)
- improve the ability of constructive criticism in the evaluation of their own and others' artistic efforts and results

IV. FILM AND MEDIA CULTURE AND ART

1. Observing, experiencing and accepting elements of film and media creation

Students will:

- identify and compare the main features and elements of art films and basic methods of transposing elements of real or fictional life into film
- recognize general aesthetic and ethical values and ideas conveyed in certain art films, their own film media artworks and the artworks of other students
- in the forms of learning involving film and media, establish links between the newly acquired knowledge and the pre-existing experience and knowledge
- acquire a positive attitude to film and media art.

2. Acquiring knowledge of elements of film language and media activities

Students will:

- deliberately employ artistic film making methods, techniques, technologies and expression tools
- identify basic elements of the film language (frame, scene, sequence) and the types of media activity
- recognise use of elements of other types of art in film and media art.

3. Participation in media activities and film creation

Students will:

- confidently participate in media activities and film making
- use different techniques and tools of film and media art in making a short film or media artwork
- become familiar with the jobs and fields (direction, cinematography, editing, multimedia etc.) that require knowledge of the film and media art methods, techniques and technologies
- recognise links between film and media art and other forms of art, and other educational areas.

4. Communication, socialisation and collaboration through media activities and creation

Students will:

- work together and learn to share and accept responsibility in the course of preparing a group film and media artwork.

5. Understanding and appreciating film creation and media activities

Students will:

- explain, orally or in writing, why they like or dislike a certain art or amateur film or media work

- notice the behaviour and motivation of characters in film
- differentiate between basic film and media genres, types and époques (comedy, drama, science fiction, horror, television series etc.)
- find connections between their own film and media experience and the knowledge from other educational areas and subjects (e.g. literature)
- acquire a positive and independent critical attitude to film and media art.

V. DRAMATIC CULTURE AND ART

1. Observing, experiencing and accepting theatre

Students will:

- recognise and compare main characteristics and elements of drama and basic methods by which the elements of real life are dealt with in drama
- recognize general aesthetic and ethical values and ideas conveyed in certain plays, their own theatrical works and those of other students
- in the forms of learning involving theatre, establish links between the newly acquired knowledge and the pre-existing experience and knowledge
- acquire a positive attitude to theatre and their own and others' work in the area of theatre.

2. Participation in theatre

Students will:

- confidently participate in mentored and independent theatre projects
- employ a number of dramatic techniques and elements of dramatic expression in performing and writing or improvising a short play
- become familiar with theatre jobs (costume design, set design, sound and lights management, direction, dramaturgy etc.)
- recognise the connection between theatre and other artistic forms and media and with other educational areas.

3. Acquiring knowledge of elements of theatre

Students will:

- deliberately employ a number of forms of dramatic expression (voice and speech, gestures and mimic, body movement etc.)
- develop concentration, empathy and awareness of interpersonal relationships and behaviour necessary in role-playing or developing a simple typical drama character
- learn about the basic techniques involved in writing and setting up a play and about the basic classification of dramatic genres and characters
- recognise elements of drama in various media (theatre, film, literature).

4. Communication, socialisation and collaboration through theatrical activities and creation

Students will:

- collaborate and learn how to share and accept responsibility in group dramatic projects and performances
- recognise different interpersonal relationships and behaviour, their causes and ways to establish harmony and collaboration
- notice behaviour and motivation of characters in dramatic situations, and thus learn more about their psychological development and gain better control of their behaviour.

5. Understanding and appreciating theatre

Students will:

- explain, orally or in writing, why they like or dislike a certain artistic or amateur theatrical work
- recognise behaviour and motivations of characters in theatrical works

- learn basic theatre genres (comedy, drama etc.) and their application (in theatre, film, visual media, school context etc.)
- find connections between their own theatre experience and the knowledge from other educational areas and subjects (e.g. literature)
- acquire a positive critical attitude to dramatic art in various media.

VI. ART OF MOVEMENT AND DANCE

1. Observing, experiencing and accepting dance

Students will:

- notice aesthetic and ethical qualities in dance
- notice basic elements of dance expression in a short dance performance
- identify different dance types using various sources data and the available technology and media
- express their attitude to and embrace the forms of dance art they are surrounded with.

2. Acquiring knowledge of elements and structure of movement and dance

Students will:

- identify basic spatial elements in a short dance performance
- demonstrate awareness of factors of movement
- master simple steps and rhythms using basic dance structure
- demonstrate the ability to use their bodies as an instrument of simple artistic dancing expression
- connect elements in deliberate movement sequences.

3. Self-expression through dance creation and performance

Students will:

- explore and communicate in movement their own ideas, experiences, feelings and attitudes
- improvise movements, using a wide array of stimuli in order to expand their dance "vocabulary"
- choose and use in a structured way the basic elements of space, intensity of movement, rhythm and the body in improvising and forming a dance sequence
- independently create a short dance performance in the set form
- practice concentration and memory in the course of observation (perception), creation and performance (reproduction) of a dance sequence
- feel joy and self-confidence at performing publicly.

4. Communication, socialisation and collaboration through dance

Students will:

- explain their own ideas, feelings and attitudes to others in the course of creation of a dance composition
- through active cooperation be able to share responsibility with others in the course of the creation and performance of a dance composition
- encourage peers with special needs to express themselves through dance in their own way
- communicate with a partner and the group through movement
- watch and analyze dance performances of other students, as well as their own, with appreciation and interest

5. Understanding and appreciating dance

Students will:

- demonstrate appreciation for aesthetic and ethical qualities of dancing expression in selected dance performances

- acquire a positive attitude to the body as the instrument dance expression
- acquire a positive attitude to dance-related activities of others, use constructive criticism in comparing different dance-related activities and in discussing dance performances
- become familiar with Croatian dance tradition and culture
- respect dance artists and the art of dancing.

The third cycle

I. ACTIVE OBSERVATION AND UNDERSTANDING OF THE WORLD OF ART AND PARTICIPATION IN ART EDUCATION AND ARTISTIC CREATION

1. Observing and experiencing artistic creation and activities and their aesthetic value (perception and reception)

Students will:

- identify aesthetic and ethical values and themes and recognise and compare special features and elements of artistic expression in appropriate works of art, in their own and others' artistic creation, as well as in their surroundings
- compare the new art experience with the existing art and general knowledge and experiences
- express a positive attitude to art as a significant part of culture.

2. Participation in artistic creation and activities (creation or production; performance or reproduction)

Students will:

- become familiar with various sources of data, different media and ways of artistic expression and activities
- be able to express creatively their personality, feelings, attitudes and ideas
- use artistic techniques and elements of different arts in performing and creating art.

3. Communication, socialisation and collaboration through art, design and media

Students will:

- learn about their own and others' personalities in the course of group art-related activities
- learn to respect and appreciate differences among people and acquire positive models of interpersonal relationships and problem-solving
- improve organisational and public performance skills
- examine and explore critical life situations and problems and translate them into artistic expressions
- become aware of the importance of symbolic and sign language in artistic and everyday communication.

4. Understanding and appreciating artistic creation and activities

Students will:

- be able to analyse and assess artwork itself and its presentation, performance and audience response
- express, orally or in writing, their opinion on a work that they either experienced or participated in creating
- recognise basic structural, genre and stylistic features of artworks
- state personal creative motivation, contribution and solutions in art-related activities
- find links between their knowledge and experience of art with their general life experience and knowledge from other educational areas
- acquire a constructive critical attitude to Croatian art heritage, as well as that of other nations and communities.

II. VISUAL ART AND DESIGN

1. Observing, experiencing and naming visual elements and compositional relations

Students will:

- on a work of art and living environment differentiate between and name types of visual art composition
- with the help of the teacher, analyze, notice and explain compositional relations in a work of visual art and in the surroundings
- study works of visual art and observe different expression styles characteristic of individual artists and historical periods
- on the basis of teacher's analysis and examples, notice and explain features of contemporary design and new media
- on the basis of their observation of works of art and their own art experience, differentiate between, name and explain specific visual art techniques and their use.

2. Developing skills and mastering visual art techniques

Students will:

- further improve their ability to use already acquired visual art techniques and gain new experience in the employment of techniques and new media, to the extent to which the school equipment permits
- on the basis of their observation of works of art and their own art experience, explore visual art techniques to find those that allow them to best express their own visual messages
- in solving a moderately complex visual art problem, within a design assignment or in free expression, apply skills and techniques for work in planned two-dimensional and three-dimensional visual art techniques
- acquire the skill of integrating various sources of data into a visual form or message
- acquire the skills necessary for solving visual art problems, including the skill of creating artworks.

3. Creation and expression in the visual art language

Students will:

- use visual art elements and apply appropriate skills and visual art techniques to express feelings, experience, ideas and attitudes in two-dimensional and three-dimensional forms of visual art and design and new media
- express creative competence and decision-making skills in solving a moderately complex visual art problem and apply it in creating a visual artwork or carrying out a design assignment
- in the process of solving a visual art problem demonstrate visual art memory, concentration, and consistency in visual art activities
- explore two-dimensional and three-dimensional art and design techniques and thus experience the joy of creation and shaping different elements, experiences and ideas into a visual message
- in exploring and creating visual artwork, improve the ability to express their interests and sensibility, thus reinforcing self-awareness and self-confidence
- with a mentor, restore a part of the process of creation (reconstruction) of a work of art through analysis.

4. Consideration of visual art and design and evaluation of students' visual artworks

Students will:

- apply appropriate visual art language (terminology) in analysing and evaluating works of visual art and students' artworks and methods used in their creation, presentation and audience response
- express, orally or in writing, their impressions and opinion with respect to the visual and design artworks they have seen in a gallery, museum or in their own surroundings

- establish links between their art experience and knowledge and the contents from other educational areas and expand and integrate knowledge
- establish links between their art experience and knowledge and their personal life experience, thus enriching their experience
- in the evaluation of their own artworks and those of other students, independently apply standard principles of evaluation
- expand on the basic aesthetic judgments in everyday life and use them as the basis for lifelong learning.

5. Communication and socialisation through visual art, design and visual art creation

Students will:

- shape a relatively complex visual message and partially independently interpret visual messages of other „senders“
- demonstrate basic organisational and presentational skills by presenting their own and others' artwork
- examine and explore critical life situations and problems and shape them into visual art expressions that they will present to others
- demonstrate respect and appreciation of differences among people and acquire models of positive interpersonal relationships and problem-solving
- apply the language of symbols and signs in visual and everyday communication
- use multimedia and ICT to express and develop a specific idea.

III. MUSICAL CULTURE AND ART

1. Observing, experiencing and accepting musical arts and creation (perception and reception)

Students will:

- express and describe their own feelings, experiences, thoughts and attitudes after listening to various musical artworks
- demonstrate self-respect and self-confidence and express authenticity of experience
- explore ideas and concepts of musical art
- describe and assess multiple roles of music in everyday life of the individual and the wider community
- learn how to take a stand on musical art and works and express it.

2. Acquiring knowledge of elements of musical art and creation

Students will:

- use musical art to conceive and express their own ideas
- compare and juxtapose art types and forms of various past and present cultures and traditions
- develop interpretative competences by playing music actively
- recognise and name musical instruments and various vocal, instrumental and vocal-instrumental groups and ensembles on the basis of sound and appearance
- compare, differentiate between and identify stylistic periods, prominent authors of the period and significant works and express their experience of them.

3. Participating in musical activities and self-expressing through music

Students will:

- express themselves creatively using as many senses as possible
- apply knowledge of music through the integration of theoretical knowledge and practical skills
- express their own ideas, thoughts and feelings in relatively complex rhythmic and melodic improvisations

- individually or in group carry out simple music projects and feel the joy of participation in musical activities
- recognise, use and try out various methods and techniques in studying musical works or in the course of their creation and performance, and in the course of the creation or performance of their own music
- acquire and develop self-respect in musical activities.

4. Communication, socialisation and collaboration through musical experience and expression

Students will:

- explore the diversity of music expression from historical, geographical and economic standpoint using the knowledge and skills acquired in other educational areas
- collaborate, particularly with students with special needs; learn how to share responsibility in group performances and projects
- communicate and share artistic experience and explore the connection between the creation (production) of musical works and their impact on the world we live in
- experience loyalty, unity and tolerance and explore possibilities of communication of various cultures and art areas through music
- participate in the creative process of experiencing musical works and in the performance or creation of musical works, come to understand the role perseverance has in success, in musical art, as well as in other arts and other fields of human activity.

5. Understanding and appreciating music

Students will:

- analyse and assess expressive quality of artistic works, in accordance with their age
- critically describe their experience of and attitude to musical works whose performance they listened to live or recorded, or a piece of music they read or listened to using (information and communication) technology
- improve their own musical ability and respect the direction and the trajectory of others' musical development
- express their opinion and attitude in the evaluation of their own and others' artistic efforts and results.

IV. FILM AND MEDIA CULTURE AND ART

1. Observing, experiencing and accepting elements of film and media creation

Students will:

- identify and compare the main features and elements of art films and basic methods of transposing elements of real or fictional life into film
- recognize general aesthetic and ethical values and ideas conveyed in certain art films, their own film media artworks and the artworks of other students
- in the forms of learning involving film and media, establish links between the newly acquired knowledge and the pre-existing experience and knowledge
- acquire a positive and independent attitude to film and media art and express it.

2. Acquiring knowledge of elements of film language and media activities

Students will:

- improve their acquired ability to employ film and media techniques, resources, technologies and forms encountered earlier in accordance with the available equipment
- on the basis of the observation of film and media works of art and personal experience, explore the techniques and forms that best express their own audio-visual messages
- acquire the skill of integrating various sources of data in film or media form or message
- acquire valuable skills of film and media techniques, resources, technology and forms.

3. Participation in media activities and film creation

Students will:

- express ideas, experiences and feelings audio-visually and convert it into media and film messages and works
- express creative competence in film and media creativity.

4. Communication, socialisation and collaboration through media activities and film creation

Students will:

- form a complex audio visual message and interpret others' audio-visual messages
- demonstrate basic skills of creating and presenting their own film and media works and works of other students
- examine and explore life situations and problems important to them and translate them into film and media expressions that they will present to others
- express, respect, and appreciate differences among people and become familiar with models of positive interpersonal relationships and problem-solving
- apply language of symbols and signs in audio-visual communication
- express and develop a specific idea using multimedia information-communication technology.

5. Understanding and appreciating film creation and media activities

Students will:

- be able to analyse and assess the contents of film and media achievements, as well as their presentation, performance and audience response
- orally or in writing, express their own opinion on a film or media work that they have watched or created, as well as on the featured characters, their relations; the causes and consequences of the featured events, situation and problems
- recognise basic structural, genre and stylistic features of art films
- explain personal creative motivation, contribution and solutions in group film and media activities and works
- connect the knowledge acquired through their own film and media experience with the knowledge from other educational areas and subjects (e.g. literature, history, other art areas etc.)
- acquire a positive critical attitude to film and media culture and works through the exposure to selected Croatian and world films, appropriate to students' age, and raise the awareness of the Croatian and world film and media heritage.

V. DRAMATIC CULTURE AND ART

1. Observing, experiencing and accepting theatre

Students will:

- recognise and compare main characteristics and elements of drama and basic methods by which the elements of real life are dealt with in drama
- recognize general aesthetic and ethical values and ideas conveyed in certain plays, their own theatrical works and those of other students
- in the forms of learning involving theatre, establish links between the newly acquired knowledge and the pre-existing experience and knowledge
- express a positive attitude to theatre.

2. Participation in theatre

Students will:

- employ a number of dramatic techniques and elements of dramatic expression in performing and writing or improvising a short play
- depending on their aptitudes, participate in theatre activities (costume design, set design, sound and lights management, direction, dramaturgy etc.).

3. Acquiring knowledge of elements of theatre

Students will:

- develop concentration, empathy and awareness of interpersonal relationships and behaviour necessary in role-playing or developing a simple typical drama character with recognisable speech, movements, behaviour and characteristics
- independently write dramatic episodes according to given guidelines
- deliberately employ a number of forms of dramatic expression (voice and speech, gestures and mimic, body movement etc.).

4. Communication, socialisation and collaboration through theatrical activities and creation

Students will:

- become more aware of their own and other students' personalities in group work and activities
- be able to creatively express their personality, feelings, attitudes and ideas
- confidently explore everyday themes and issues, interpersonal relationships, and the personal process of growing up, and shape them into drama expressions
- learn how to respect and appreciate differences among people and through dramatic techniques (forum – theatre etc.) become familiar with models of positive interpersonal relationships and amicable conflict resolution, especially among peers.

5. Understanding and appreciating theatre

Students will:

- be able to analyse and assess contents of dramatic and theatre activities and works and their presentation, performance and audience response
- orally or in writing, express their own opinion on a play that they have seen or created, as well as on its characters, relations among them; the causes and consequences of the events in the play, situations and problems
- recognise basic structures, genre and stylistic features of plays
- explain personal creative motivation, contribution and solutions in group theatre activities and works
- connect the knowledge acquired through their own theatre experience with the knowledge from other educational areas and subjects (e.g. literature, history, other art areas etc.)
- acquire a positive critical attitude to drama and theatre through the exposure to selected Croatian and world theatre, appropriate to students' age, and raise the awareness of the Croatian and world theatrical heritage.

VI. ART OF MOVEMENT AND DANCE

1. Observing, experiencing and accepting dance

Students will:

- explain their experience of a performed dance using previously acquired knowledge of dance elements and structures
- recognise the harmony of expressive qualities of movement and space
- name, learn and recognize different types of dancing expression
- apply the gained experience to the natural surroundings.

2. Acquiring knowledge of elements and structure movement and dance

Students will:

- kinaesthetically feel, recognise and properly perform dance movements and steps
- practice movement through space and basic combinations of expressive qualities of movements
- recognise characteristic rhythmic figures and combinations and connect them with patterns of various styles
- demonstrate knowledge of dance structures
- demonstrate skill in a certain dance style
- move confidently and deliberately.

3. Self-expression through dance creation and performance

Students will:

- demonstrate the ability to deliberately integrate expressive qualities of movements
- expand their dance "vocabulary" by exploring and selecting dance materials and making a short dance composition
- memorise and perform a sequence of movements using previously acquired knowledge
- use techniques and elements from other arts in creating and performing their own dance sequence.

4. Communication, socialisation and collaboration through dance

Students will:

- openly discuss their dance performance with their partner or group to the benefit of performance
- demonstrate perseverance in exploring and practicing selected dance material
- accept responsibility in group creation and performance
- provide support to peers with special needs in their own dance expression.

5. Understanding and appreciating dance

Students will:

- analyse the structure, dance vocabulary, performance, message and meaning of the dance performance they have seen
- improve the ability to objectively evaluate their own and others' dance performance
- express the awareness of the opportunities to connect the dance art with other educational areas
- express the awareness of the inclusive nature of dance
- compare the Croatian dance traditions and culture those of other nations
- promote the dance art in their surroundings.

The fourth cycle (vocational schools)

I. ACTIVE OBSERVATION AND UNDERSTANDING OF THE WORLD OF ART AND PARTICIPATION IN ART EDUCATION AND ARTISTIC CREATION

1. Observing and experiencing artistic creation and activities and their aesthetic value (perception and reception)

Students will:

- recognise general artistic qualities in different media of artistic expression and in their surroundings
- identify general aesthetic and ethical qualities and themes in works of art their own artwork and that of other students
- develop a taste and interest in artistic creation and activities.

2. Participation in artistic creation and activities (creation or production; performance or reproduction)

Students will:

- become familiar with various sources of data, different media, technologies and techniques of artistic expression
- express self-confidence, personal attitudes and ideas by participating in guided and independent art projects
- be able to express their personality, feelings, attitudes and ideas in appropriate forms of art activity and creation
- explore through art everyday problems, interpersonal relationships, social conflicts and growing up and identity-forming processes.

3. Communication, socialisation and collaboration through art, design and media

Students will:

- explore life and answer some important questions about themselves and society and translate that into public artistic creation
- be able to express creatively their personalities and worldviews
- improve skills necessary to communicate, present and perform publicly
- respect and appreciate differences among people as well as individual ways of expression; embrace art as an instrument for enhancing communication and relationships
- expand on the class topics through project and cross-curricular activities

4. Understanding and appreciating artistic creation and activities

Students will:

- express, orally or in writing, their opinion on artistic activities or works that they either experienced or participated in creating
- be able to describe their role in an artistic activity or creation
- find links between their knowledge and experience of art and their general life experience and knowledge from other educational areas
- become familiar with the importance of symbols and signs in communication and contemporary culture
- learn basic criteria for evaluating artworks
- become familiar with the correlation between certain artistic forms and works and the historical and social context in which they were created
- recognise the values of Croatian art and art heritage in the context of other cultures and universal values.

II. VISUAL ARTS AND DESIGN

1. Observing, experiencing and naming visual elements and compositional relations, and characteristics of styles

Students will:

- notice and describe basic elements and simple compositional relations on famous paintings, sculptures and buildings
- notice and describe basic characteristics of major styles and periods, particularly those that were important in Croatian art
- name and describe basic visual art elements and compositional relations as well as characteristics of major styles and periods on famous works of visual art using the appropriate visual art terminology
- describe their experience of selected works of visual art and design
- acquire a positive attitude to visual art, especially to Croatian visual art heritage.

2. Developing skills and mastering visual art techniques

Students will:

- draw simple visual art elements and compositional relations found in stylistically typical two-dimensional and three-dimensional artworks
- use and develop newly acquired skills and visual art techniques to present their ideas in two-dimensional visual art techniques, including computer graphics
- use and develop newly acquired skills and visual art techniques to express their ideas, attitudes and personality in two-dimensional visual art techniques, including computer graphics.

3. Creation and expression in the visual art language

Students will:

- with professional guidance, restore a part of the process of creation (reconstruction) of a stylistically typical visual artwork, through analysis and interactive exercises, preferably in group work
- express their own ideas, attitudes and personality in two-dimensional and three-dimensional area of visual art and design, including computer graphics.

4. Consideration of visual art and design and evaluation of students' visual artworks

Students will:

- in a guided analysis/interpretation of an acclaimed painting, sculpture or building apply basic visual art terminology
- identify and compare basic features of some famous works of visual art, typical of some major art periods and styles, particularly those important in Croatian art
- with professional guidance, differentiate between basic elements of visual artworks and visual art techniques on famous works of visual art, typical of some major art periods and styles
- recognise and explain in simple words the aesthetic qualities of some famous works of visual art and in their surroundings.

5. Communication and socialisation through visual art, design and visual artistic creation

Students will:

- promote a positive attitude to visual art and design artworks of the local and Croatian cultural heritage, including traditional art
- use ICT in searching and exploring information on visual artworks or periods
- use the knowledge of most famous paintings, sculptures and buildings, art periods, styles and cultures, to deepen their understanding of contents from other subjects
- feel joy at learning about and communicating through art.

III. MUSICAL CULTURE AND ART

1. Observing, experiencing and accepting musical art and musical creation (perception and reception)

Students will:

- describe their experience of a musical work
- notice and name the elements of a musical work
- recognise and differentiate between characteristics of different stylistic periods
- recognise aesthetic and ethical values of a musical work
- through different musical activities, adopt and promote educational values forming groundwork for lifelong learning
- improve concentration and memory through musical activities.

2. Acquiring knowledge of elements of musical art and creation

Students will:

- recognise, name and differentiate between elements of a musical work
- compare and differentiate between characteristics of different stylistic periods
- explore and compare various musical directions and composing techniques.

3. Participating in musical activities and self-expressing through music

Students will:

- recognise and differentiate between different expression tools in analyzing and performing musical works
- express themselves creatively and interpret their own ideas, thoughts and attitudes through musical activities
- practice motor skills and strengthen self-control through different musical activities.

4. Communication, socialisation and collaboration through musical experience and expression

Students will:

- experience joy at participating in individual or group musical activities
- practice communication through music
- strengthen compassion and collaboration through musical activities, in particular with peers with special needs and developmental disabilities and share responsibility for the quality of a group creation
- by listening to and performing musical works belonging to different styles and tradition, reinforce their identification with Croatian culture and develop appreciation of other cultures and traditions.

5. Understanding and appreciating music

Students will:

- point out characteristic elements of a musical work and establish how they help them in understanding it and aesthetically evaluating it
- identify and describe certain stylistic features
- express their own impressions and compare their artistic experience with others and develop criticism and self-criticism
- promote and increase their sensitivity to musical art.

IV. FILM AND MEDIA CULTURE AND ART

1. Observing, experiencing and accepting elements of film and media creation

Students will:

- recognise general and stylistic features of film and media works
- recognize general aesthetic and ethical values and ideas conveyed in certain art films and media works, their own film and media artworks and the artworks of other students
- in the forms of learning involving film and media, establish links between the newly acquired knowledge and the pre-existing experience and knowledge from other educational areas and subjects
- develop a taste and interest in film and media.

2. Acquiring knowledge of elements of film language and media activities

Students will:

- use acquired film and media techniques, resources, technologies and forms in accordance with the available school equipment and set didactic goals
- on the basis of observation of film and media works of art and personal experience, explore techniques and forms that can best express their own audio-visual messages
- acquire the skill of integrating information from different sources into a film or media form or message
- acquire skills of interpretation and the knowledge of using film and media techniques, resources, technology and forms.

3. Participation in media activities and film creation

Students will:

- express ideas, experience and feelings audio-visually and shape them into media and film messages
- express creative competence in film and media activities.

4. Communication, socialisation and collaboration through media activities and film creation

Students will:

- form a stylistically and technically complex audio-visual message and interpret audio-visual messages of others
- demonstrate basic skills preparing and presenting their own film and media works
- explore life and answer some important questions about themselves and society and translate that into public media or film creation
- respect and appreciate differences among people and learn models of positive interpersonal relationships and problem-solving
- employ the language of symbols, signs and metaphors in their audio-visual communication
- express and develop a specific idea in multimedia information-communication technology.

5. Understanding and appreciating film creation and media activities

Students will:

- be able to analyse and assess the contents of film and media works as well as their presentation, performance and response of the audience, critics and peers
- orally or in writing, express their own opinion of a film or media work that they have watched or created
- recognise basic features and connotations of art films
- state and explain their personal creative motivation, contribution and solutions in group film and media activities and works

- find connections between their own film and media experience and the knowledge from other educational areas and subjects (e.g. literature, history, other arts etc.)
- acquire a positive critical attitude to film and media culture and creation on selected works of Croatian and world film art, appropriate to the age of the student, and develop awareness of Croatian and world film and media heritage.

V. DRAMATIC CULTURE AND ART

1. Observing, experiencing and accepting theatre

Students will:

- recognise main characteristics of drama in various media (theatre, film, television etc.)
- recognize general aesthetic and ethical values and ideas conveyed in certain plays, their own theatrical works and those of other students
- in the forms of learning involving theatre, establish links between the newly acquired knowledge and the pre-existing experience and knowledge of theatre and that from other educational areas
- form a taste and interest in theatre.

2. Participation in theatre

Students will:

- be able to express their personality, feelings, attitudes and ideas in appropriate forms of dramatic activity and creation
- depending on their skills and affinities, participate in other theatre activities (costume design, set design, sound and lights management, direction, dramaturgy etc.).

3. Acquiring knowledge of elements of theatre

Students will:

- with self-confidence contribute their attitudes and ideas participate in guided and independent drama projects
- use various elements of dramatic expression (voice and speech, gesture and mimic, movement, written and improvised text etc.) in the creation of their own work
- be able to use empathy in developing dramatic characters according to their abilities and affinities.

4. Communication, socialisation and collaboration through theatrical activities and creation

Students will:

- explore the questions of life, interpersonal relationships, personal and social conflicts and shape their answers into public drama expressions
- develop and form their personality and worldview
- become familiar with public communication and performance
- promote respect and appreciation of differences among people and reinforce models of positive interpersonal relationships and amicable conflict resolution between individuals and social groups.

5. Understanding and appreciating theatre

Students will:

- orally or in writing express their own opinion of a play that they have seen or participated in, as well as its characters, their relations and activities, story, situations and problems, and their causes and consequences
- be able to explain contribution in a theatre project
- find connections between their own theatre experience and the knowledge from other educational areas and subjects (e.g. literature, history, ethics etc.)
- acquire basic criteria for the evaluation of dramatic culture and art

- become familiar with the impact of historical and social context and universal values on dramatic literature and art
- recognise the basic values of the Croatian dramatic heritage in the context of the world dramatic culture.

VI. ART OF MOVEMENT AND DANCE

1. Observing, experiencing and accepting dance

Students will:

- recognise, differentiate between and name elements of artistic dance
- experience dance as a performing art closely related to other arts
- be able to choose and describe a short dance performance of their liking, which meets standard aesthetic and ethical criteria.

2. Acquiring knowledge of elements and structure of movement and dance

Students will:

- use elements of movement and dance in the given dance structure
- demonstrate the ability to use basic skills in choreography
- integrate the basic level of dance technique and elements of expression of movement into a short dance performance.

3. Self-expression through dance creation and performance

Students will:

- express their dance "vocabulary", as well as their feelings and attitudes by independently choosing dance material and preparing a short dance performance
- demonstrate knowledge and sophisticated taste with the choice of music background to their dance composition
- demonstrate composure and concentration in public performance.

4. Communication, socialisation and collaboration through dance

Students will:

- explore, express and communicate through movement their ideas, feelings and attitudes to the audience
- demonstrate composure, self-control, resourcefulness and responsibility in public performances
- demonstrate team spirit in the process of creating, shaping and performing a dance composition
- include peers with special needs in choreographic formation of dance.

5. Understanding and appreciating dance

Students will:

- present a well-thought-out review of a dance performance that they have seen
- demonstrate basic knowledge of dance art in the cultural and historical context
- demonstrate knowledge and positive attitude to the artistic and traditional dance heritage
- promote inclusiveness of dance art
- promote multicultural approach to life and co-existence.

The fourth cycle (grammar schools)

I. ACTIVE OBSERVATION AND UNDERSTANDING OF THE WORLD OF ART AND PARTICIPATION IN ART EDUCATION AND ARTISTIC CREATION

1. Observing and experiencing artistic creation and activities and their aesthetic value (perception and reception)

Students will:

- recognise special features and elements of structure, genre and style of an artwork
- compare ways in which various artistic expressions and media tackle everyday contents and experiences
- identify special aesthetic and ethical qualities and themes in works of art their own artwork and that of other students as well as in their surroundings
- become familiar with characteristics of major artistic traditions and époques
- develop a taste and interest in artistic creation and activities.

2. Participation in artistic creation and activities (creation or production; performance or reproduction)

Students will:

- use various sources of data, different media, technologies and techniques of artistic expression in creating and presenting their own artworks and presenting artworks of others
- participate, according to their abilities and affinities, in artistic creation and activities
- be able to express their personality, feelings, attitudes and ideas in the given art form
- use the language and tools of art to explore interpersonal relationships, life choices, social conflicts, and personal development and identity formation.

3. Communication, socialisation and collaboration through art, design and media

Students will:

- explore life and answer some important questions about themselves and society and translate that into public artistic creation
- creatively express their personality and worldview
- learn skills necessary to communicate, present and perform publicly
- respect and appreciate differences among people as well as individual ways of expression; embrace art as an instrument for enhancing communication and relationships
- explore selected topics and phenomena from the area of art, culture or social life through project and cross-curricular activities
- demonstrate the knowledge of the language of symbols and signs in communication and in forming of contemporary culture.

4. Understanding and appreciating artistic creation and activities

- Students will:
- be able to analyse and critically view their own and others' artworks
- orally or in writing express and support with arguments their opinion on artistic activities or works that they either experienced or participated in creating
- analyse special structural, genre-related and stylistic features of artworks and art activities in the corresponding cultural context
- analyse their own creative motivation, contribution and solutions in an artistic creation or activity
- apply the knowledge acquired through personal artistic experience in other educational areas
- find links between artistic forms and works and the respective historical and social context in which they were created

- demonstrate knowledge of the values of Croatian art and art heritage in the context of other cultures and universal values.

II. VISUAL ARTS AND DESIGN

1. Observing, experiencing and naming visual elements and compositional relations, and characteristics of styles

Students will:

- notice, describe, and compare specific visual art elements and compositional relations on famous and contemporary works of art in the areas of painting, sculpture, architecture and urban planning, design and video art
- notice and describe the elements of visual art form and their relations on man-made and natural formations in the surroundings
- recognise and in a simple drawing depict specific compositional relations on examples of famous and corresponding contemporary examples of visual artworks
- notice, describe, and compare characteristics of various art periods and styles, i.e. movements
- in naming and describing elements of formal and compositional relations and characteristics of visual artworks of various styles and movements, apply appropriate visual art language, i.e. terminology
- describe their experience of selected works of visual art and design
- acquire a permanent positive attitude towards visual art and design.

2. Developing skills and mastering visual art techniques

Students will:

- draw specific visual art elements and compositional relations found in two-dimensional and three-dimensional artworks
- use and develop newly acquired skills and visual art techniques in their work in two-dimensional and three-dimensional visual art techniques and contemporary design projects.

3. Creation and expression in the visual art language

Students will:

- with professional guidance, but partially independently, restore a part of the process of creation (reconstruction) of a visual artwork, through analysis and interactive exercises, in individual and group work
- express their own ideas and attitudes in two-dimensional and three-dimensional areas of visual art and design, including computer graphics.

4. Consideration of visual arts and design and evaluation of students' visual artworks

Students will:

- apply appropriate visual art language (using appropriate terminology) in an independent analysis/interpretation of an work from the area of painting, sculpture, architecture and urban planning, design and video art
- recognise, compare and link characteristics of works of visual art created in various art periods, styles and movements and identify their connection to modern art
- independently differentiate between and explain techniques used in creating some of the famous works of visual art of various art periods, styles and movements
- independently observe and explain interplay of various media in conceptual art, happening and performance and, with the help of the teacher, that in modern artistic expression
- recognise, compare, assess and explain aesthetic values on famous (and similar new) works of visual art and formations in their surroundings
- independently apply standard criteria for aesthetic and ethical evaluation of works of visual arts and that of the living environment
- form an independent value judgment; express and explain their critical view of the aesthetic quality in their surroundings.

5. Communication and socialisation through visual art, design and visual artistic creation

Students will:

- promote a positive attitude to visual art and design on the local and global level
- recognise, compare and describe forms of communication in visual art, including traditional art, at the national and global level
- participate in complex projects with the goal of performing complex tasks in individual and group work
- assume responsibility in performing complex tasks in individual and group work
- apply ICT in browsing and researching information on visual art and in presenting a visual artwork, artistic style or movement
- present the results of an (independent) analysis, interactive exercise or research by browsing various sources of data, in the classroom, in a short oral presentation, on a poster or computer graphic presentation (Power Point presentation), individually or in group
- gain better understanding of other subjects by linking contents from those subjects with the knowledge about works of visual art from various historical periods, styles, movements and cultures.

III. MUSICAL CULTURE AND ART

1. Observing, experiencing and accepting musical art and musical creation (perception and reception)

Students will:

- describe their experience of different musical works and notice that their experience varies depending on the type and style of music
- recognise and name all elements of the musical works that they listen to
- recognise and differentiate between characteristics of musical works in terms of style, type and form
- point out an aesthetically valuable and ethically acceptable musical activity and musical work
- participate in diverse musical activities and develop educational values conducive to the development of a responsibility, independence, competence and satisfaction
- by engaging in musical activities, practice concentration, memory and perseverance, which are crucial qualities in the process of creating or performing musical works.

2. Acquiring knowledge of elements of musical art and creation

Students will:

- recognise, name and differentiate between elements of music in various musical activities
- compare and differentiate between characteristic qualities of different musical genres and forms of individual stylistic periods
- explore a specific musical genre or style and compare it with their own creative expression
- explore various contemporary music composer's techniques and genres and compare them with their personal creative expression.

3. Participating in musical activities and self-expressing through music

Students will:

- express their feelings, experiences, attitudes in a syncretic and comprehensive manner through multiple art forms and techniques
- in musical activities practice motor skills and self-control necessary to perform successfully
- express their ideas, feelings and thoughts in rhythmic and melodic improvisations
- study musical works and recognise and differentiate between various tools and techniques of expression and apply the acquired knowledge and experience in creating and performing music.

4. Communication, socialisation and collaboration through musical experience and expression

Students will:

- individually or in group, make simple musical performances and experience the joy of participation in musical activities
- explore different routes of communication and collaboration in musical arts and compare them with those in other arts and sciences
- practice communication and presentation skills by performing publicly
- collaborate, especially with peers with special needs and developmental disabilities and share responsibility in group performances and activities
- by listening to and performing musical works of various genres, styles and traditions, reinforce their identification with Croatian culture and develop appreciation of other cultures and traditions.

5. Understanding and appreciating music

Students will:

- notice and describe characteristics of different musical works and stylistic periods in the social and historical context
- express their impressions and share their artistic experience and further improve assertiveness
- analyse elements of musical works with respect to style, genre and form and explain their role in aesthetic evaluation of the work
- foster constructive criticism in the evaluation of their own and others' musical activities and results
- recognise artistically and aesthetically valuable musical works and differentiate between excellent and poor performances

IV. FILM AND MEDIA CULTURES AND ART

1. Observing, experiencing and accepting elements of film and media creation

Students will:

- recognise special features and elements of film and media works and compare techniques for translating the contents of real life into a film and a media work
- differentiate between special aesthetic and ethical values and ideas conveyed in certain art films and media works, their own film and media artworks and those of other students
- become familiar with the characteristics of main traditions and periods in the world and Croatian film and media art
- in the forms of learning involving film and media techniques, tools, technologies and forms, establish links between the newly acquired knowledge and the pre-existing experience and knowledge from other educational areas
- form and explain their taste and preferences in the area of film and media art.

2. Acquiring knowledge of elements of film language and media activities

Students will:

- improve and develop film and media techniques, tools, technologies and forms in accordance with the available school equipment, set didactic goals and students' aptitudes
- on the basis of observation of film and media works of art and personal experiences, explore techniques and forms by which they can best express their own worldviews and audio visual messages
- acquire the skill of integrating various sources of information into a film or media form or message
- acquire skills of using film and media techniques, resources, technologies and forms.

3. Participation in media activities and film creation

Students will:

- express ideas, experiences and feelings audio-visually and translate them into media and film works and messages
- use various techniques and elements of film and media expression for creating and forming their own film or media work for a wider audience
- use film and media art resources to explore relevant topics of interpersonal relationships, social conflicts, maturation and identity formation
- according to their own competences and aptitudes, participate in other media and film activities.

4. Communication, socialisation and collaboration through media activities and film creation

Students will:

- be able to express their personality, feelings, attitudes and ideas in their own film or media work
- jointly explore life and answer some important questions about themselves and society and translate that into public media or film creation
- develop and form their personalities and worldviews in communication with the audio-visual environment
- improve their skills of public communication and performance
- grow more confident in communicating and presenting their film and media works
- contribute to the environment of respect and appreciation of differences among people and demonstrate models of positive interpersonal relationships and amicable conflict resolution between individuals and social groups.

5. Understanding and appreciating film creation and media activities

Students will:

- acquire standard criteria for critical judgment and evaluation of works of film and media art, their own artworks and those of other students
- orally or in writing, express well-formed opinions of a film or media work that they have watched or created; of the participants, their relations and activities; presented events, situations and problems and their causes and consequences
- analyse special structural, genre-related, stylistic and cultural features of artistic film and media works
- explain their own creative reasons, contributions and solutions in group film and media projects
- find connections between their own film and media experience and the knowledge from other educational areas and subjects (e.g. literature, history, other arts etc.)
- find connections between works and elements of film and media art and the respective historical and social context
- demonstrate knowledge of the importance of Croatian film heritage in the context of the global film culture and universal values.

V. DRAMATIC CULTURE AND ART

1. Observing, experiencing and accepting theatre

Students will:

- recognise special features and elements of drama and compare methods and media whereby the contents of real life are translated into dramatic form
- differentiate between special aesthetic and ethical values of certain plays, their own theatrical works and those of other students
- become familiar with the characteristics of major theatrical traditions and periods

- in the forms of learning involving theatre, establish links between the newly acquired knowledge and the pre-existing experience and knowledge of theatre and that from other educational areas
- form a taste and interest in theatre.

2. Participation in theatre

Students will:

- use a range of dramatic techniques and elements of dramatic expression in performing and creating their own written or improvised dramatic units intended for a wider audience
- using dramatic tools, explore relevant topics concerning interpersonal relationships, social conflicts and maturation and identity formation
- according to their own competences and aptitudes, participate in other art activities (costume design, set design, sound and lights management, direction, dramaturgy etc.)
- according to their own competences and aptitudes, be able to perform and interpret important plays.

3. Acquiring knowledge of elements of theatrical activities and creativity

Students will:

- confidently and actively participate in guided and independent drama projects
- independently form drama units on the basis of prompts
- use various elements of dramatic expression (voice and speech, gesture and mimic, movement, written and improvised text, genre and style etc.) in creating their own dramatic work
- be able to use empathy to develop dramatic characters ranging from simple to complex, in accordance with their competence and aptitudes.

4. Communication, socialisation and collaboration through theatrical activities and creation

Students will:

- be able to express their personality, feelings, attitudes and ideas in a dramatic piece
- in groups explore relevant personal and social topics and shape their answers into public drama expressions
- develop and form their personalities and worldviews
- improve their skills of public communication and performance
- develop public speaking skills and improve confidence in public speaking
- contribute to the environment of respect and appreciation of differences among people and demonstrate models of positive interpersonal relationships and amicable conflict resolution between individuals and social groups.

5. Understanding and appreciating theatre

Students will:

- acquire standard criteria for critical judgment and evaluation of artistic dramatic works, their own dramatic works and those of other students
- orally or in writing, express well-formed opinions of a play that they have watched or created; of the participants, their relations and activities; presented events, situations and problems and their causes and consequences
- analyse special structural, genre-related, stylistic and cultural features of artistic dramatic works
- explain their creative motivation, contribution and solutions in group theatrical activities or works
- find connections between their theatre experience and the knowledge from other educational areas and subjects (e.g. literature, history, other arts etc.)

- find connections between works and elements of dramatic culture and art and the respective historical and social context
- demonstrate knowledge of the importance of Croatian dramatic heritage in the context of the global dramatic culture and universal values

VI. ART OF MOVEMENT AND DANCE

1. Observing, experiencing and accepting dance

Students will:

- recognise, differentiate between and name elements of dance art
- experience dance as a performing closely related to other arts
- follow the latest developments in dance art using data range of information sources, modern technology and the media
- analyse and describe using appropriate terminology a relatively short dance performance of their choosing, in accordance with the standard aesthetic and ethical values.

2. Acquiring knowledge of elements and structure of movement and dance

Students will:

- demonstrate a relatively advanced level of knowledge of dance by bringing together (synthesising) elements of movement and dance into a structure
- demonstrate their knowledge of deliberate use of basic choreographic elements
- integrate relatively advanced dance techniques with elements of expression of movement in the creation of their own dance performance.

3. Self-expression through dance creation and performance

Students will:

- present an advanced dance "vocabulary", as well as their feelings and attitudes by independently choosing dance material and preparing a short dance performance
- express awareness of syncretism of artistic expressions by integrating artistic techniques and elements of other arts in creating and performing their own dance performances
- demonstrate knowledge and sophisticated taste with the choice of music background to their dance compositions
- demonstrate the ability to include contents from other educational areas in creating and performing their own dance pieces
- express personality, ideas, feelings and attitudes in their choice of choreography of dance compositions
- demonstrate composure in public performance.

4. Communication, socialisation and collaboration through dance

Students will:

- explore, express and communicate through movement their ideas, feelings and attitudes to the audience
- demonstrate composure, self-control, resourcefulness and responsibility in public performances
- demonstrate team spirit in the process of creating, shaping and performing a dance composition
- include peers with special needs in choreographic formation of dance.

5. Understanding and appreciating dance

- demonstrate relatively advanced knowledge of dance art in the analysis, synthesis, and interpretation of movement and dance elements and structure in the evaluation of their own and others' dancing expression
- promote the holistic nature of dance art in their dance expression

- promote the inclusive nature of dance art
- present a well-thought-out critical review of a dance performance that they have seen
- demonstrate knowledge of dance art in the cultural and historical context
- demonstrate knowledge and positive attitude to artistic and traditional dance heritage in historical and cultural context
- promote multiculturalism in their worldviews and communication.

SUBJECT FRAMEWORK OF THE AREA: Visual Arts and Design, Musical Culture and Art, Dramatic Culture and Art, Film Art, Dance Art, and the modules: Dramatic Culture and Art (integrated in the language and communication area), Film and Media Culture and Art (integrated in the language and communication area), Traditional and Local Cultures (integrated art module)



7. Physical Education and Health Area

DESCRIPTION OF THE AREA

The purpose of the physical education and health area is to equip students with the knowledge, skills and habits in the area of physical health and a positive attitude to physical activities and healthy lifestyle and thus prepare students for full realisation of their physical and mental potentials.

Physical education and health area is crucial in a holistic development of students: the development of their physical and psychological abilities as well as biotic and social motor skills and key competences, especially those necessary in adequate adaptation to changing working and living circumstances. It enables students to get to know their bodies, their functions, potential and limitations, to understand the importance of good physical condition and health and to learn how to maintain and improve it, to understand the correlation between physical, mental and emotional health, to learn how to adopt healthy habits and avoid those with adverse effects, and to learn where they can seek help in the event of illnesses, learning disabilities or disabilities in their personal and social lives.

This approach will best prepare students for lifelong learning and help them develop healthy personal and healthy relationships and a healthy level of self-respect and respect of others. This will in turn allow them to grow into proactive and entrepreneurial individuals.

The knowledge, competences, skills and values acquired within this area directly improve the health of students, guide their development into optimistic individuals, strengthen their self-respect and confidence and increase the quality of their school, family and social lives. The experience gained within this area helps students develop a positive outlook on themselves, others and the environment and adapt and overcome any obstacles on the road to maturity.

The core contents of the area are directed towards encouraging fairness and promoting generally accepted social and sports values. Students are encouraged to resolve any disputes peacefully and to develop the ability to control their emotional reactions (anger management). Contents and activities from this area are important in practicing perseverance and overcoming fears, in developing positive personal traits and assertiveness. This area encourages cooperation, helping others and keeping to a plan. It also prepares students for team work and encourages healthy communication.

EDUCATIONAL GOALS OF THE AREA

Students will:

- understand their own body, its development and functions
- improve their knowledge and skills in kinesiology and practice those skills in a number of sports and recreational activities
- develop the awareness of the importance of physical exercises in preserving and improving health
- know how to adequately assess and select physical activities and diets that can best help them maintain health and good physical condition; understand the connection between unhealthy diet and certain diseases and disorders
- understand the concepts and characteristics of unhealthy habits, risky behaviours and addictions and know how they affect one's health
- understand the physical, mental and emotional aspects of personal development through childhood and adolescence
- understand the characteristics of good communication and its importance in the family, school and social environment
- develop self-respect and self-confidence and importance in the process of personal development and maturation
- understand the concepts of sex and sexuality and the significance of a responsible sexual behaviour and gender equality
- understand the meaning and implications of the concepts of prevention of diseases and promotion of health
- be able to recognise different forms of physical and emotional violence and abuse and ways in which it can be prevented.

EXPECTED STUDENT ACHIEVEMENTS PER EDUCATIONAL CYCLE

The first cycle

I. PHYSICAL EXERCISE AND HEALTH

Students will:

- acquire basic knowledge in health protection and improvement
- recognise and understand some basic ways in which physical exercise affects the body
- become aware of the importance of health
- recognise and become aware of the benefits of regular and adequate personal hygiene
- develop awareness of the importance of doing physical exercise in adequate hygienic conditions
- become aware of the role of an adequate diet in healthy growth and development
- acquire the basic knowledge regarding the connection between environmental protection and physical exercise
- recognise and become aware of the importance of perseverance for successful performance of physical exercises.

II. ANTHROPOMETRY

Students will:

- become aware of the need to monitor their body weight and height
- learn to monitor their own basic anthropometric measurements
- recognise and become aware of the need to keep their anthropometric measurements at an optimum level
- develop an awareness of collaboration and team work.

III. THE THEORY AND PRACTICE OF KINESIOLOGY

Students will:

- acquire general understanding of proper performance of physical exercises
- learn how to apply general theory of kinesiology in everyday life and work
- acquire general knowledge in sports kinesiology
- consider the results of their initial and final test of general physical measurements
- learn how to apply basic safety measures in the performance of physical exercises
- be able to recognize and use some basic equipment.

V. PHYSICAL FITNESS

Students will:

- learn how to do morning physical exercise
- become aware of the benefits of regular short breaks while doing physical exercise
- learn how to use natural forms of movement in everyday life and work
- learn how to apply the skills acquired through physical exercise in difficult conditions.

V. PREVENTION OF DISEASES AND PROMOTION OF HEALTH

1. Mental, social and emotional health

Students will:

- describe and discuss their feelings
- ask questions about their health and physical development
- describe themselves in relation to others (their class, teacher, family, friends, peers, older and younger students in school)

- explore and share ideas about relationships among people
- demonstrate respect by sharing responsibilities in the group
- recognise similarities and differences between people and uniqueness of every person.

2. Risky behaviours

Students will:

- identify substances that have harmful effects on the brain and the body
- become aware of immediate and long-term consequences of abusing harmful substances
- learn that smoking is banned or limited in public places with the goal of protecting public health
- learn about the correlation between alcohol consumption and an increased risk of accidents and injuries and learn about its adverse effect on the body
- remember that it is forbidden to sell and serve alcohol to minors.

3. Interpersonal relationships, reproductive health and parenthood

Students will:

- discuss friendship, various personality traits and their potential effect on friendship
- explain the concepts of safety and self-protection and learn whom they can ask for help if they do not feel safe
- explain why they should treat their body with respect
- become aware of the need to take care of their body and learn whom they can turn to if they need help
- discuss concepts of birth and care for a new born baby
- become aware of their duties and responsibilities in their family and in other groups.

4. Diet and health

Students will:

- recognise the importance of food and its role in the protection and improvement of health and physical development
- describe the availability of different foodstuffs and their ideal proportion in their diet
- list ways to properly store food
- describe the impact of food marketing and promotion on their diet.

5. Prevention of diseases and promotion of health

Students will:

- discuss basic facts regarding the development of their body
- give examples of health protection through the adoption of proper hygiene
- recognise that medicines and other substances can help in the protection of health
- describe how their behaviour can affect their own health.

The second cycle

I. PHYSICAL EXERCISE AND HEALTH

Students will:

- develop awareness of their own and others' health
- recognise and understand some basic ways in which physical exercise affects the body
- recognise and become aware of the value of regular and proper maintenance of footwear and clothing hygiene
- acquire basic understanding of a proper diet during physical exercise

- recognise and become aware of the importance of exercising in the nature
- develop personal responsibility for their own health
- recognise and understand the need to protect the environment during the physical exercises
- recognise and become aware of the importance of persistence in physical exercise.

II. ANTHROPOMETRY

Students will:

- understand the importance of a proper body posture and how physical exercise can help maintain it
- learn to monitor their motor abilities
- recognise and become aware of the need to keep their motor abilities at an optimum level
- develop positive personality traits.

III. THE THEORY AND PRACTICE OF KINESIOLOGY

Students will:

- acquire a general understanding of proper performance of physical exercises
- learn how to apply general theory of kinesiology in everyday life and work
- acquire general knowledge in sports kinesiology
- consider the results of their test of motor abilities
- learn to monitor educational outcomes of their physical activities and exercise
- learn to implement safety measures on outdoor and indoor sports facilities
- recognise and learn to use exercise equipment.

IV. PHYSICAL FITNESS

Students will:

- learn how to use exercise equipment in various sports and leisure activities
- become aware of the benefits of long breaks while doing physical exercise
- learn to apply the acquired theoretical knowledge of selected sports activities
- learn how to apply the skills acquired through physical exercise in difficult conditions

V. PREVENTION OF DISEASES AND PROMOTION OF HEALTH

1. Mental, social and emotional health

Students will:

- identify their qualities that lead to a sense of self-esteem
- become aware of their strengths and weaknesses and how they affect their sense of self-respect
- explain how different feelings, beliefs and activities affect self-respect
- explore their rights and those of other people; accept responsibility for the respect of human rights
- recognise that people are different in many ways and accept the responsibility to be supportive of themselves and of others
- observe the simultaneous need of human beings for privacy and for communication and unity with others.

2. Risky behaviours

Students will:

- describe the impact of their peers, the media and the social environment on their attitudes to substance abuse
- learn about the correlation between alcohol and drug consumption and an impaired decision-making ability
- **learn how to react** in risky situations involving substance abuse (alcohol intoxication, being offered intoxicants)
- learn about the negative consequences of substance abuse on individuals, their families and friends
- explore the affects and risks involved in the excessive use of the Internet and video games on physical, social and mental health.

3. Interpersonal relationships, reproductive health and parenthood

Students will:

- describe the impact of physical and emotional changes on behaviour in puberty
- recognise how physical changes impact one's self-perception
- embrace physical and emotional changes in puberty
- explain the importance and benefits of friendships and interpersonal relationships for health.

4. Diet and health

Students will:

- apply basic knowledge of proper dietary and eating habits
- explain dietary needs in various periods and circumstances of life
- explain how advertising and the media affect eating habits
- accept the role of regular physical activities and balanced diet in the protection of health
- participate in the selection of foodstuffs and planning of their family meals.

5. Prevention of diseases and promotion of health

Students will:

- identify places and people whom they may turn to for advice and help regarding any health issues
- establish the factors of health risks in the environment
- describe ways to avoid accidents and potential consequences of accidents
- demonstrate responsibility for their health in regular physical activity.

The third cycle

I. PHYSICAL EXERCISE AND HEALTH

Students will:

- recognise and become aware of the value of health as a crucial factor in all human activities
- recognise and understand some basic ways in which physical exercise affects the body
- recognise and become aware of the importance of regular and proper hygiene and maintenance of the exercise equipment
- acquire basic understanding of the role of proper diet in sports lifestyle
- recognise and become aware of the need for regular physical examination
- develop environmental awareness
- acquire basic understanding of the factors that lead to the development of certain diseases.

II. ANTHROPOMETRY

Students will:

- recognise the need to establish a healthy ratio between muscular mass and subcutaneous adipose tissue
- learn to monitor their bodily functions
- recognise and become aware of the need to keep their bodily functions at an optimum level
- develop the ability to control their emotional reactions.

III. THE THEORY AND PRACTICE OF KINESIOLOGY

Students will:

- acquire a deeper understanding of proper performance of physical exercises
- learn how to apply a deeper understanding of kinesiology in everyday life and work
- acquire general knowledge in sports kinesiology
- consider the results of their initial, final and transitive tests
- learn to monitor their anthropometric measurements
- learn to implement safety measures at swimming pools
- recognise and learn to use swimming equipment.

IV. PHYSICAL FITNESS

Students will:

- learn how to use exercise equipment in breaks from studying
- become aware of the benefits of a balanced ratio between mental work and physical exercise
- learn to apply the acquired theoretical knowledge in their sports and recreational activities
- learn to react in emergency situations

V. PREVENTION OF DISEASES AND PROMOTION OF HEALTH

1. *Mental, social and emotional health*

Students will:

- analyse the connection between students' skills and competences and the scope of opportunities open to them
- explain why school success is important for their further education and the career
- discuss factors affecting the formation of one's personality; learn to appreciate different personalities and respect differences among people.

2. *Risky behaviours*

Students will:

- explain potential negative consequences of substance abuse on the person's physical, mental, emotional, and social life, as well as the legal consequences of substance abuse
- analyse effect of substance abuse on other life choices and their future
- acquire and develop social skills necessary to resist peer pressure and make right decisions in risky situations.

3. *Interpersonal relationships, reproductive health and parenthood*

Students will:

- acquire skills of making wise decisions in interpersonal relationships and sexual behaviour
- consider the development of their own sexuality, as well as that of others
- explain decisions and behaviours that help protect their reproductive health, as well as that of others

- learn about available services that give information and support in case of sex-related risks, including sexual abuse
- learn about right to confidentiality and legally granted rights and responsibilities related to sexual and reproductive health.

4. Diet and health

Students will:

- analyse the connection between food composition, energy consumption and health effects
- describe types of eating disorders, risk factors related to eating disorders and ways to tackle them
- apply their knowledge about proper diet in planning their meals
- analyse the impact of the media on their perception of their body and appearance.

5. Prevention of diseases and promotion of health

Students will:

- describe how unhealthy habits and behaviours may lead to the development of chronic diseases and conditions
- define and analyse steps that can be taken in the prevention of acute and chronic diseases
- explain the importance of the promotion of health for the individual and the community.

The fourth cycle (vocational schools)

I. PHYSICAL EXERCISE AND HEALTH

Students will:

- learn to take care of their own health, as well as that of people around them
- recognise and understand how physical exercise affects certain anthropometric measurements
- recognise and be aware of the importance of regular and proper hygiene and maintenance of sports facilities
- acquire the healthy dietary habit of increasing food and liquid intake at times of increased physical efforts
- promote the importance of physical exercise in the prevention of diseases as well as in the protection, improvement and promotion of health as a general human value
- acquire the basic knowledge about prevention of injuries during physical exercise
- acquire the habit of wearing adequate clothing while exercising to prevent adverse consequences of weather conditions.

II. ANTHROPOMETRY

Students will:

- learn how to independently calculate their body mass index (BMI)
- learn to monitor their anthropometric measurements
- recognise and be aware of the need to maintain anthropometric measurements at an optimum level
- develop awareness of their own abilities and thus improve self-respect and confidence.

III. THE THEORY AND PRACTICE OF KINESIOLOGY

Students will:

- acquire general, fundamental competences in the use of kinesiology operators
- acquire specific competences in the use of kinesiology operators in their future occupation
- compare the results obtained in the initial, transitive and final testing
- learn to monitor their anthropometric measurements

- learn to implement safety measures at skiing and ice-skating facilities
- recognise and become aware of basic rules concerning physical exertion during physical exercise
- learn to use skiing and ice-skating equipment.

IV. PHYSICAL FITNESS

Students will:

- learn how to use the acquired knowledge in work and leisure activities
- become aware of the benefits of active rest
- learn how to exercise independently
- learn the skill of problem-solving in emergency situations.

V. PREVENTION OF DISEASES AND PROMOTION OF HEALTH

1. Mental, social and emotional health

Students will:

- recognise verbal and non-verbal communication messages
- critically evaluate their plans and actions with respect to their long-term private and professional goals
- acquire social skills necessary for peaceful conflict resolution, coping with competitive environment and making changes in relationships.

2. Risky behaviours

Students will:

- explain the effect of alcohol and substance abuse on the person's behaviour and the ability to make sound judgment and decisions with respect to interpersonal and sexual relationships
- learn how to react in the event of an accident or emergency caused by alcohol or substance abuse
- learn how specific problems related to alcohol and substance abuse vary depending on the culture, country and the region
- acquire and develop supportive attitude to peers facing alcohol or substance problems..

3. Interpersonal relationships, reproductive health and parenthood

Students will:

- identify and analyse the question of power struggle in interpersonal relationships and how it can have both positive and negative consequences
- explain the importance and the need for commitment, trust and respect in emotional and sexual relationships
- identify specific characteristics of some typical interpersonal relationships, including marriage
- explain and acquire concepts of responsible sexual behaviour and sexual relationships
- analyse the importance, permanence and responsibilities of parenthood and the impact parenthood has on one's life choices and opportunities.

4. Diet and health

Students will:

- consider the impact of society and the media on one's dietary habits
- explain consumers' right to information and food producers' obligation to adhere to food laws and regulations
- provide help and support to peers suffering from eating disorders.

5. Prevention of diseases and promotion of health

Students will:

- impartially assess their health needs
- analyse ways to protect and promote health in all phases of life
- integrate regular physical activity as an indispensable element of their lifestyle
- participate actively in programmes of health promotion and disease prevention
- analyse and assess risks of the environment and one's workplace in the development of certain diseases and conditions.

The fourth cycle (grammar schools)

I. PHYSICAL EXERCISE AND HEALTH

Students will:

- learn to take care of their own health, as well as that of people around them
- recognise and understand how physical exercise affects certain anthropometric measurements
- recognise and be aware of the importance of regular and proper hygiene and maintenance of sports facilities
- acquire the healthy dietary habit of increasing food and liquid intake at times of increased physical efforts
- promote the importance of physical exercise in the prevention of diseases as well as in the protection, improvement and promotion of health as a general human value
- acquire the basic knowledge about the prevention of injuries during physical exercise
- acquire the habit of wearing adequate clothing while exercising to prevent adverse consequences of weather conditions.

II. ANTHROPOMETRY

Students will:

- learn how to independently calculate their body mass index (BMI)
- learn to monitor their anthropometric measurements
- recognise and be aware of the need to maintain anthropometric measurements at an optimum level
- develop awareness of their own abilities and thus improve self-respect and confidence.

III. THE THEORY AND PRACTICE OF KINESIOLOGY

Students will:

- acquire general, fundamental competences in the use of kinesiology operators
- acquire specific competences in the use of kinesiology operators in their future occupation
- compare the results obtained in the initial, transitive and final testing
- learn to monitor their anthropometric measurements
- learn to implement safety measures at skiing and ice-skating facilities
- recognise and become aware of basic rules concerning physical exertion during physical exercise
- learn to use skiing and ice-skating equipment.

IV. PHYSICAL FITNESS

Students will:

- learn how to use the acquired knowledge in work and leisure activities
- become aware of the benefits of active rest

- learn how to exercise independently
- learn the skill of problem-solving in emergency situations.

V. PREVENTION OF DISEASES AND PROMOTION OF HEALTH

1. Mental, social and emotional health

Students will:

- recognise verbal and non-verbal communication messages
- critically evaluate their plans and actions with respect to their long-term private and professional goals
- acquire social skills necessary for peaceful conflict resolution, coping with competitive environment and making changes in relationships
- analyse and evaluate how attitudes and skills related to interpersonal relationships affect engagement and participation in community activities.

2. Risky behaviours

Students will:

- explain the effect of alcohol and substance abuse on the person's behaviour and the ability to make sound judgment and decisions with respect to interpersonal and sexual relationships
- learn how to react in the event of an accident or emergency caused by alcohol or substance abuse
- learn how specific problems related to alcohol and substance abuse vary depending on the culture, country and the region
- acquire and develop supportive attitude to peers facing alcohol or substance problems.

3. Interpersonal relationships, reproductive health and parenthood

Students will:

- identify and analyse the question of power struggle in interpersonal relationships and how it can have both positive and negative consequences
- explain the importance and the need for commitment, trust and respect in emotional and sexual relationships
- identify specific characteristics of some typical interpersonal relationships, including marriage
- explain and acquire concepts of responsible sexual behaviour and sexual relationships
- analyse the importance, permanence and responsibilities of parenthood and the impact parenthood has on one's life choices and opportunities.

4. Diet and health

Students will:

- consider the impact of society and the media on one's dietary habits
- explain consumers' right to information and food producers' obligation to adhere to food laws and regulations
- provide help and support to peers suffering from eating disorders.

5. Prevention of diseases and promotion of health

Students will:

- impartially assess their health needs
- analyse ways to protect and promote health in all phases of life
- integrate regular physical activity as an indispensable element of their lifestyle
- participate actively in programmes of health promotion and disease prevention
- analyse and assess the risks of the environment and one's workplace in the development of certain diseases and conditions
- analyse and critically assess priorities in a fair distribution of available health and recreational resources and facilities and propose changes.

SUBJECT FRAMEWORK OF THE AREA: Physical and Health Education, and module: Health Education

IX. EXPECTED STUDENT ACHIEVEMENTS IN VOCATIONAL AND ART EDUCATION

The expected achievements of students upon completion of vocational education include acquisition of fundamental general and vocational competences of a certain level, scope, profile and quality, necessary to meet the requirements of a qualification enabling students to enter the labour market, to continue their education and be equipped for lifelong learning or to meet students' personal development needs.

The goal of vocational curriculum is to equip students with vocational competences set out by the vocational qualifications standard. The vocational qualifications standard increases with the complexity of competences, while the complexity of competences affects the duration of the educational cycle required for the completion of education.

Taking into consideration the possibility of acquiring the lowest level of vocational qualifications at the age of sixteen, vocational curricula will be developed leading to a vocational qualification of the minimum duration of two years, adhering to the defined ratio between the of general educational and vocational contents.

Expected student achievements after the completion of art education are acquiring of core and art competences of a specific level, scope, profile and quality necessary for obtaining of art qualifications.

The general education component contains general education subjects that are compulsory for each level of the qualification. In the first year the general education component of vocational and art curricula for of the acquisition of the lowest level of vocational and art qualification accounts for at least 60% the curriculum, while in the second year it accounts for at least 40% of vocational and art curriculum.

Key competences should be acquired in the areas of the Croatian language and literature, mathematics, foreign languages, informatics and technology, biology, chemistry, physics, history, religion/ethics, geography, physical education and health as well as art areas, such as visual arts, music and others.

The vocational component of the vocational curriculum comprises the compulsory and the optional component and the component set by the school curriculum. The fundamental contents of the vocational component of the vocational curriculum are prescribed at the national level, taking into consideration the complexity of the qualification.

Art schools may develop their own curricula providing that students are provided with both the key and specialised contents and competences.

The goal of the secondary vocational education is to produce a skilled worker and a responsible and independent individual, according to the requirements of the respective level of qualification.

The expected student achievements upon completion of vocational education, in accordance with the level of acquired qualification, are as follows:

- developed communication competences
- developed mathematical competences
- developed competences in science, social sciences and humanities
- developed informatics and communication competences
- developed technical and technological competence
- developed creative competences and critical opinion
- developed awareness of the importance of health
- developed social competences
- developed environmental awareness
- understanding, respecting and exercising human rights
- developed entrepreneurial competences
- the ability to organise one's learning.

The requirements for the acquisition of a specific level of competence will depend on the developmental status of the student and the level of vocational education. At higher levels the focus should be on the development of the competences necessary in carrying out independent research, forming critical opinion, organising learning, as well as the social competences related to work ethics and working culture, the development and improvement of self-awareness, sensitivity to others, understanding of others, and developing socially desirable behaviour.

Educational goals of vocational curriculum and the art school curriculum will be determined in terms of the expected student achievements.

The scope of individual educational areas and subjects will also depend on the level of secondary education and the complexity of the respective qualification. Vocational and art curricula depend on the scope of the respective qualification, and this is the criteria for determining students' workload, both in vocational and art education.

Educational contents in vocational schools will be organised into subjects (Mathematics, History, Physics etc.) or into modules, depending on nature of the subject and/or vocation (for instance, integration of chemistry and physics, or biology and chemistry etc.).

The vocational curriculum determines the ratio of the *theoretical and practical* classes. This ratio depends on the type and complexity of activities within a specific occupation; in other words, it depends on the competences that students need to acquire to be able to perform the activities for which they have obtained a vocational qualification in a responsible and efficient manner.

The National Curriculum Framework presupposes interdisciplinary themes, which make up a part of the core, differentiated and school curricula. In their programmes, schools can, depending on their specific needs and possibilities, shape those into modules or integrated subjects, taking into consideration students' abilities and affinities. It is necessary to determine cross-curricular contents that will be integrated in subjects (for instance, education for health, education for human rights, education for intercultural understanding, education for entrepreneurship, prevention programmes etc.). In this respect, the focus on values and the role of schools in providing guidance to students are very important.

Taking into consideration student-oriented approach in the case of students with special educational needs, it is important to develop differentiated programmes, adapted to various competences and affinities of students.

To ensure effective horizontal as well as vertical mobility, it is necessary to assign to the general educational and vocational components of the vocational curriculum ECVET credits (*European Credits for Vocational Education and Training*) that express the scope of acquired competences and students' workload. Credits are assigned to the subject, module and qualification, and in the educational process they include, among other things, results of student's independent work and homework.

Vocational education is completed with students' preparation of a final practical work, its presentation before a panel. If the panel passes the student, he or she obtains certificate of the acquired level, profile and scope of qualification.

Art education is regulated under special regulations.

X. CHILDREN AND STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

The National Curriculum Framework creates conditions for the education of children and students with special educational needs in accordance with their abilities and needs.

In the strategic developmental documents on education – *The Education Sector Development Plan 2005 – 2010* and the *Primary and Secondary Education Act (2008)* – students with special educational needs are defined as students with a range of disabilities and degrees of disability as well as gifted students. It is a very diverse group of children and students for which different goals and expected achievements must be set, to which different contents must be taught and with which different methods of learning and teaching must be employed, in accordance with their specific needs and competences. *The National Curriculum Framework* also sets out conditions for including students who cannot regularly attend school due to an illness in the process of education.

All special need groups require certain adjustments in the process of education as well as different kinds and levels of support. One of the requirements for the realisation of the curriculum for children with special educational needs are continual and high-quality professional development programmes for the staff, and a high level of cooperation among all implementers of the process of education: the education policy makers, the staff in educational institutions, expert associates, intergovernmental institutions, families and the local community

Educational institutions have to assume a range of roles to provide students with the necessary support both inside and outside the institution. In collaboration with the local community, schools develop a network of services and programmes catering to children and students with special educational needs and their families.

Carefully developed programmes of undergraduate and postgraduate studies and continual professional development of educators, teachers and expert associates grant an adequate level of competence and professionalism in the education of students with special educational needs and communication with their parents.

These competences include the ability to recognize students' needs, understand the characteristics of children and students with disabilities and gifted children and students as well as the knowledge of the educational methods and their application, especially the method of individualised and differentiated teaching and evaluation that take into account the abilities of each student, his or her talents and need for the sense of accomplishment.

1. Children and Students with Disabilities

The goal of *the National Curriculum Framework* is to create conditions in which children and students of educational institutions at the levels of pre-school, primary and secondary education can achieve the maximum level of knowledge, competence and skill in accordance with their abilities and provide them with best tools to achieve independence success, self-respect and satisfaction.

Inclusive education refers to the creation of conditions for students with disabilities to acquire maximum student achievements within the regular education system. The concept of inclusive education envisages educational institution as an interactive educational community designed to provide students with the experience of success and to prepare them for adulthood and participation in the labour market.

The National Curriculum Framework also lays down educational contents for the children and students whose abilities require participation in special programmes of knowledge acquisition and competence and skill development, giving them best possible tools for independent life and active inclusion in society and labour market.

Inclusion in the education system

Children and students with disabilities are included in the education system using appropriate measures of support in various scopes, depending on student's personal needs. These measures are prescribed in supporting legislating documents. It is particularly important to ensure the availability of adapted forms of teaching and other professional and support services and programmes.

Inclusion into the system

Pre-school institutions	<p>curriculum for pre-school education, individualised curriculum and additional professional support</p> <p>special curriculum for pre-school education of children with serious disabilities in special education groups</p>
Primary and secondary school	<p>core and differentiated curriculum and additional professional support</p> <p>core and differentiated curriculum and individualised syllabus</p> <p>special curriculum for special education classes of students in a school institution</p>
Institutions of special education	<p>special curriculum for pre-school education for children with serious disabilities</p> <p>special curriculum for students with serious disabilities</p> <p>core and differentiated curriculum and additional professional support</p>
Classes at home, classes in the hospital	core and special condensed curriculum

Children with disabilities are included in institutions of pre-school education with the necessary professional, didactic, methodical and rehabilitation support. A special education group is organised for children requiring a higher level of support. When desired results are not achieved in the education of certain students with disabilities within the regular system of education, those children can be included into institutions of special education.

It is essential to ensure early recognition of disability and provisioned necessary support in institutions of regular pre-school education. Communication with parents is also of vital importance. Parents must also be provided with necessary advice and support.

Students with disabilities who are included into regular classes in primary and secondary schools obtain a comprehensive and student-oriented support from within the educational institution or/and from support services at the local and regional level. Professional teams in educational institutions, consisting of teachers and relevant expert associates prepare individualised programmes, monitor their implementation and adjust them accordingly.

Individualised curricula are based on the core and differentiated curricula, and they are developed according to the professional assessment of student needs. Planning of an individualised curriculum is based on realistically set objectives, it takes into account student's affinities and aptitudes and it contains information on necessary forms of support, details of support and achieved results

In the process of the assessment of student's potential in terms of future inclusion in vocational education and the labour market, the student herself or himself, as well as her or his parents and the employment service representatives and prospective employers participate in the development of the individualised curriculum.

Participation of students with disabilities in higher classes of regular primary education is facilitated through the introduction of the possibility for students with disabilities to focus on the subjects and/or module(s) which match their affinities and aptitudes and withdraw from subjects and contents that do not match their affinities and aptitudes. The objective is to allow students to acquire knowledge and skills that will prepare them for vocational education and introduce them to the labour market.

The children and students who cannot successfully participate in the regular education, despite the provided support, are included in special education institutions. The objective of both regular and

special curricula taught in those institutions is to equip students with skills and knowledge necessary for the inclusion in everyday activities in accordance with students' age. Educational areas covered by the special programme are as follows:

- **Practical skills area:** personal care, domestic activities: acquire positive social habits, hygiene, healthy eating habits, recognise hazards, individually or with support carry out simple housework chores and participate in the activities that help them improve the quality of life.
- **Social life area:** spatial orientation, communication skills and numeric/mathematical literacy: be able to find their way, learn how to use public transportation, as well as the emergency, entertainment, cultural and public services, differentiate between basic time elements, acquire basic mother tongue literacy and numeric/mathematical literacy; express verbally, non-verbally and in writing; express themselves using symbols, words, sentences, numbers, colours and signs.
- **Leisure time and creativity area:** social, entertainment and creative activities: participate in social and entertainment activities and events in their immediate and wider community; choose free time activities; learn how to aesthetically shape various materials using a range of techniques.
- **Social and emotional area:** relationship with themselves, others and the environment: improve self-control, learn by observing how to treat themselves and others, differentiate between desirable and non-desirable behaviour, learn by observing friendly forms of communication and ways of expressing and protecting their fundamental rights, feelings and learn how to be assertive.
- **Physical education and health area:** motor skills: recognise and manage sensory stimuli, states and actions; develop muscle strength and coordination of movements, observe, listen, produce sounds, smell, touch, differentiate between stimuli and connect them coherently and creatively, participate in sports and recreational activities.
- **Work and production area:** work and creation: learn by observing how to independently or with assistance, perform simple jobs or parts of a production process, properly handle work tools and equipment and learn the basis of safety at work.

Classes at home shall be organised for students who are unable to attend school for an extended period of time due to an illness or a condition. Such classes are held by teachers and associates working in the student's school. Also, pre-school education and classes in the hospital shall be organised for children and students undergoing long-term hospital treatment and shall be held by of the employees of the closest respective educational institution. These forms of educational work are condensed and apply equally to regular and special education programmes.

2. Gifted and Talented Children and Students

The National Curriculum Framework creates conditions in which gifted and talented children and students can identify and develop their giftedness. The responsibility to identify gifted and talented students and ensure development of their abilities lay with each educational institution. It must also allow for the special intellectual, social, emotional and physical needs of gifted and talented children and students to be met.

Although there are significant differences among gifted and talented children and students, the overarching definition encompasses children and students with exceptional intellectual capabilities, developed ability to quickly grasp complex ideas and concepts, acquire more quickly and comprehend more deeply educational contents than their peers, they show exceptional curiosity for a specific area, demonstrate outstanding creative capabilities, resourcefulness and prolificacy as well as the ability to look at a situation or a problem from different standpoints. Gifted and talented children and students may have disabilities that interfere with the recognition of their talents or gifts and their development. Such disabilities may be encountered on the motor, sensory and emotional levels, i.e., they can be reflected in learning and behaviour. They might underperform, fail to complete assignments, behave restlessly etc. Due to those problems they might come across as average or below-the-average students and they achieve results which are below their possibilities. These children and students require a special diagnostic examination and carefully developed support.

Individualised curricula for gifted students are developed, reflecting in their contents and scope specific needs of the individual or the group for whom they are developed. The curricula should focus on an advanced level of opinion formation and problem-solving and include contents of the depth and

complexity that present an appropriate challenge and opportunity for creative expression. An individualised curriculum empowers the student and includes the forms of support that eliminate or reduce barriers for the achievement of set objectives.

Organisation of educational work and programmes for gifted students

Schools provide inclusion of gifted students in educational programmes suited to their level and type of giftedness, as well as in supplementary classes and other forms of work that encourage the development of their abilities and creativity. Developing an individualised curriculum requires appropriate adaptation and differentiation of the contents or topics, the time predicted for certain topics as well as the forms of teaching and learning.

Differentiation	
Curricular programmes	Extracurricular programmes
<ul style="list-style-type: none"> ▪ enrichment ▪ expansion ▪ acceleration ▪ mentoring ▪ competition 	<ul style="list-style-type: none"> ▪ extracurricular activities ▪ workshops ▪ summer and winter schools ▪ clubs, camps

Differentiation refers to the adaptation of the *contents of learning* (acceleration, summarizing, changing, reorganising, adaptable pace of work, use of more advanced and more complex materials, concepts etc.); *the process of learning* (intellectually more demanding problems, open-ended questions that require a higher level of analysis – research, exploring new ideas and questioning the existing ones, independent work and instructions that encourage achievement of higher levels of thinking), *products of learning* (e.g. posters, essays, lecture to other students, problem tasks for other students, mentoring other students) and *learning environment* (the kind that fosters free communication, encourages independence, creativity, innovation etc.).

Curricular Programmes

Enrichment

Enrichment refers to horizontal adaptability across the curriculum. It involves the contents and activities that fall outside the basic programme, i.e. it supplements the general curriculum without changing it. It can be realised through group work on projects expanding on the curriculum contents. Enrichment does not necessarily have to target gifted students; all students can be included in it.

Expansion

Expansion refers to vertical adaptability that enables students to move faster through the curriculum. It can contain elements of *acceleration* – when students "skip" some contents to reach the objective sooner. Also, contents of general curriculum may be enriched to make them more complex, and in this way students gain deeper insight into contents and move through the curriculum at their own pace.

Acceleration

Acceleration means inclusion of students in the regular primary education at a younger than the prescribed age or students' completion of two grades in one school year. Acceleration may take place in one subject only. The decision about earlier inclusion and transfer to a higher grade is made only after all ramifications of such acceleration are considered. The factors that have to be given particular attention when making that decision are the age of the student, level of his or her emotional and physical development, parental support, educational support and student's interest and motivation.

Mentoring

Mentors in particular areas are experts who, besides their role as teachers and trainers, have the role of leaders, role models and friends of gifted students. Gifted students may suffer from disabilities as a result of a discord between their intellectual, social and emotional maturity. This is why their mentors should, in addition to academic support, also provide them with social and emotional support. Consequently, mentoring involves assistance in the development of students' talents or gifts and emotional support

through binding and relating. Mentors may be teachers, associates, senior students, volunteers and visiting experts.

Competitions

Students are sent to competitions interesting the subjects that they show interest in. This provides them with the opportunity to demonstrate their abilities and talents and to expose them to evaluation and self-evaluation. Competitions may also be an opportunity to spot previously unrecognized gifts and talents of children and students. Competitions are organised on the level of the city and municipality, county, state (national) and region (international), both as individual and group contest.

Extracurricular programmes

Extracurricular programmes include a range of extracurricular activities, workshops, summer and winter schools and clubs. Children and students engage in extracurricular programmes according to their special areas of talent, gift and aptitudes.

Programmes of excellence

Programmes of excellence present a form of educational support for the gifted children in the development of their talents and gifts. They are realised in cooperation between schools and science and research institutions, the business sector, prominent experts in certain areas, and different NGOs. They may be implemented on the local, regional, national and international level. Schools develop and propose programmes of excellence, whereby they may cooperate with other institutions or professionals. Programmes of excellence are then evaluated and, if positively evaluated, approved by the Ministry of Education. These programmes may involve seminars, summer and winter schools, camps for gifted students, on-line programmes etc.

To respond to the specific needs of the gifted students as efficiently as possible, programmes of excellence, in addition to gifted students, also engage their parents, teachers and expert associates.



XI. ASSESSMENT AND EVALUATION OF STUDENT ACHIEVEMENTS

What is evaluated and assessed?

Evaluation is based on a comprehensive (holistic) approach, which requires the awareness and encouragement of students' general development. In this sense, educational institutions must provide systematic education of students, create positive and stimulating environment for their development in accordance with their affinities and aptitudes, and systematic monitoring of their progress. In this process a positive attitude to children's or student's personality and achievements is expected. This means that the intention is to identify and encourage development in the areas in which the student can experience success, whereas those activities that clearly cannot yield any satisfactory results are avoided. This is particularly true of the general compulsory education, which should be based on the pedagogy of success for all and the didactical agreement as its implementation tool.

School assessment should contain a qualitative and quantitative appraisal of all student achievements and engagement: an assessment of students' verbal and written response; an assessment of students' competences and abilities; an assessment of the degree in which students use their abilities and an assessment of students' engagement and activity in the classroom. In assessing students, teachers must pay special attention to students' motor and emotional development.

Students' responsibility and readiness for collaboration are also assessed. Assessment of students' behaviour is aimed at the appraisal of students' relationships with other people and the environment, as well as of their adherence to rules. Students' performance in interdisciplinary themes will also be assessed: entrepreneurship, learning to learn, personal and social development, application of information and communication technology, environmental protection, safety and health, civil education, and so will be the competences acquired in participation in various independent, class and school projects. An important element in monitoring and assessing will also be students' capability and motivation with respect to lifelong learning.

Continual monitoring and assessment of students' performance encourage students to acquire good study habits. Due to the fact that students' marks are made known to students, they have a chance to develop their ability of self-assessment, and the success of an individual becomes the need of the entire class.

Self-evaluation

Assessment of student activities and performance should allow students to develop self-evaluation skills necessary in the development of the awareness of the degree of their knowledge and acquired competences, and of the importance of permanent learning. At the same time, assessment of students' activities and performance should help them develop a positive image of themselves and encourage them to plan their work and to make independent decisions. This is achieved in the process of encouraging students to analyse and reconsider their learning strategies, as well as those of other students, which in turn helps them improve their ability for self-assessment and self-evaluation.

To develop skills of self-assessment and self-evaluation, students need to be provided with guidance in analysing their learning strategies and in the assessment of their knowledge, skills and competences. This requires teachers' continual feedback regarding students' performance. Students have to be guided and encouraged to assess their own learning strategies and performance in different ways and to improve their ability of self-assessment and self-evaluation.

School marks

School marks, irrespective of how they are expressed, have a triple role: that of recognition (diagnosis), prediction (prognosis) and encouragement (motivation). Assessment during teaching new contents (formative assessment) is a way to increase motivation and determine the quality and quantity of students' knowledge and other learning outcomes, as well as a way to monitor and guide students' progress, and evaluate the efficiency of teaching and students' learning strategies.

Monitoring and assessment strategies will vary depending on teachers' understanding of the role of the mark in the context of students' development. Recognition of specific goals of different educational cycles will also call for correspondingly different roles of marks. In the first educational cycle (grades 1 through 4) assessment based on numerical marks will have a prominent place, but with a clear description and justification of the mark and the meaning of each mark. Students of that age find it easier to comprehend verbal description of their performance, and they find it more difficult to understand the abstract quality of a numerical mark. This is particularly true of students of the first grade of primary school. In the second educational cycle (grades 5 and 6), and later in the third cycle (grades

7 and 8) and in the fourth cycle (the first two forms of secondary schools) numerical assessment will gradually take prominence, although verbal monitoring and assessment, as a kind of an interpretation of the mark, will still be important in understanding of the mark and assessment of students.

The school marks are expressed by numbers and words. Each number is followed by a verbal description of the number. The purpose of assigning a specific mark to a result or performance is compatibility with the descriptions assigned to the number (sufficient/*dovoljno* – 2, good/*dobro* – 3, very good/*vrlo dobro* – 4, excellent/*izvrsno* – 5).

The teacher's satisfaction is expressed by the word/mark *good*. This means that the teacher is satisfied with the student's achievement, i.e., that the student has done what was expected from him or her, or most of what was described in the educational standard for the subject, module or specific competence (social, learning to learn and/or others).

Only if a student's work, or an examination result exceeds the expectations will the teacher grant the mark *very good*, and this should mean that the student has more than met teacher's expectations, i.e., that the student's achievement, work and effort deserve recognition. At the end of semester or school year such students may also receive special written recognition of achievement from the head teacher or the school principal.

If a student demonstrates originality and outstanding effort and quality in his or her work, such result will be graded by the words/mark *excellent* (*izvrsno* or *odlično*). Such results are not common and therefore this word/mark should not be given too easily. Otherwise, the purpose and the value of this mark will be lost.

The word *sufficient* (*dovoljan*) is awarded with the mark 2, and this means that the teacher assessed that the student can and should perform better, i.e., that he or she is expected to achieve a better result and should make additional effort. This also means that the student's achievement is such that it meets the minimum, the threshold for positive assessment of most students, but also the maximum that some students can achieve. In vocational schools this minimum should be described in terms of competences that a student should acquire or the quality of work (products) the student should be able to do.

In the light of the new role that school marks will have in pedagogical regulation of the teaching process in the course of compulsory schooling, awarding the highest mark too easily must be avoided because it reduces pedagogical and assessment value of school marks.

School marks should not be the only or even the main factor in determining students' academic and professional future. This is especially true in the case of the transition from primary to secondary school, since secondary education is also compulsory. This means that every student has the right and obligation to move from primary to secondary school. Therefore, it is important to strive for ever better and pedagogically more efficient ways of preparing and guiding students in making decisions regarding their future profession and academic/career paths (keeping students' portfolios, focussing on subjects that students have better performance at, various students' research projects, art or other works etc.).

When drawing up subject curricula or modules, or defining specific competences, it is important to set out expected student achievements with clear criteria set for each mark on the scale from one to five. This approach to the preparation of subject curricula will be helpful to students and parents/guardians. It will allow students to have clear insight into their achievements; they will be able to better plan their studying and other school activities by continually checking their progress. The parents/guardians will also at every moment know the expectations of the school and criteria for each mark.

How to assess students' work

In the assessment of students' work and results, the teacher decides on the principles (criteria) and methods (strategy) of assessment. The teacher includes all students in the assessment, if possible, and explains them the principles (criteria) of assessment. Students should know what is expected of them at all times.

As a counterbalance to traditional examinations, original and reliable techniques of assessment and self-assessment should be used (for instance: various lists of knowledge, skills, competences, questionnaires, presentations of works). Long-term research or group projects also call for teacher's assessment of students involved.

In primary school one should avoid standards and norms set in advance. Advantage should be given to the comparison of student's progress with respect to his or her initial test results. In vocational schools

learning outcomes can often be described or defined in terms of the norms for or descriptions of a satisfactory level of service.

It is considered useful, and even necessary, to prepare lists of competences for personal self-assessment and monitoring for both teachers and students.

Criteria for the assessment of the level and depth of student achievements will be elaborated after determining student achievements per educational areas, subjects and interdisciplinary themes.

Students with special educational needs

In contemporary schools the starting point is the presumption that every child has some special personal developmental needs. It can also be presumed with great certainty that every student has a certain talent or gift for something; in other words, that he or she has predispositions for a certain area of human activity (creative writing, speaking, singing, working with hands, motor activities, practical work, crafts and arts, acting, perseverance, research, social skills etc.).

Every identified talent or gift requires from the teacher to monitor its development, to create a stimulating environment for the development of the child's potential or gift and to create pedagogical situations that will allow the child to demonstrate and fully realise that potential or gift.

In the organisation of school competitions it is necessary to make sure that the discrepancies in knowledge of individual competitors are not too big; competitions should be avoided in which it can be presumed in advance who will be the best, and who can by no means achieve a good result, because competitions between students of very disparate knowledge and abilities can have more negative than positive consequences.

Assessment has to be based on students' development and the process of learning, taking into consideration their individual initial knowledge and skills and their objectives. In the assessment there has to be understanding for obstacles in learning that have arisen due to the student's learning disabilities or his or her disorders.

Therefore, students whom professional committees have recognised as students with difficulties and learning disabilities cannot be graded with a negative mark, irrespective of which year of compulsory schooling they are in. Classroom and homework assignments and activities need to be adapted to their abilities so as to encourage their maximum development; in other words, to eliminate any obstacles to their development (stigmatising, overemphasising their disability, failing to take recognize progress made etc.).

Students with special educational needs are assessed in a monitoring process aimed at assessing student's psychological and physical status (with the focus on his or her competences and abilities), identifying potential for the development of skills and competences that can compensate for the segment of functions that are fully or partially lost, and identifying permanent disabilities and problems. Further, this means that the focus should be placed on identifying abilities to learn and acquire new knowledge and skills and to use them in everyday life (the levels of intellectual development, the voice-and-speech development and communication skills, the attention and concentration span, motivation, willingness, affinities, goals, other aspects of social and emotional development).

Criteria for monitoring and assessing student achievements will be prescribed per subjects and/or modules, and per key competences.

XII. MONITORING AND EVALUATING THE IMPLEMENTATION OF THE NATIONAL CURRICULUM FRAMEWORK

Quality improvement and quality assurance in the education system are Croatia's developmental goals of utmost priority. The system of external evaluation and self-evaluation of schools has been developed with the goal of continual monitoring of the effectiveness of educational work and performance of schools.

1. External Evaluation – State Matura and National-Level Examinations

External evaluation implies the involvement of all implementers of the educational work, as well as all education beneficiaries.

The quality of the implementation of the *National Curriculum Framework* depends on standardised and systematic training and education of all implementers of education in pre-school institutions and primary and secondary schools, which begins with an improved quality of initial education at institutions of higher education. This prerequisite will be met by the introduction of a licensing system, which will require a systematic, regular and continual professional development of educators, teachers, associates and principals.

The State Matura – the secondary school leaving examination – puts into place a standardised instrument for measuring and evaluating students' knowledge and competences upon completion of the four-year secondary education. For students of grammar school programmes passing this examination is a prerequisite for the completion of their secondary education, whereas students of four-year vocational schools take State Matura examination if they decide to continue their education at institutions of higher education or schools of higher professional education.

The introduction of the State Matura, as a form of external evaluation of education, puts into place a permanent system of external monitoring of the implementation of educational goals. The objective of the State Matura examination is to make the knowledge, skills, competences, attitudes and values that the student has acquired in the course of schooling, measurable and comparable. The State Matura, as a form of external evaluation, is the same for all students; all students take it at the exact same time and in the same conditions. It therefore yields comparable indicators of student knowledge at the national level. The National Centre for External Evaluation of Education is the competent body in the implementation of State Matura in accordance with the *Ordinance on the State Matura Examination*.

Students with disabilities which do not impair their intellectual abilities and who have acquired all the contents required by the programme, are entitled to take an adapted State Matura exam in the form and the medium that will allow them, within their capacities, to demonstrate comparable results.

Results of the State Matura give the most objective information on student achievements to the students and the parents, the school founders and the education policy makers.

Another way of monitoring the efficiency of the education system in primary and secondary schools is by systematically conducting national examinations in all educational areas, i.e. subjects in all grades.

Alongside the State Matura, which is conducted at the end of secondary education, and the national examinations, which are a form of external evaluation of primary and secondary education, other forms of evaluation will be implemented as well: experimental programmes, monitoring and evaluation of new contents, monitoring and evaluation of textbooks and other teaching aids, monitoring and evaluation of educational technologies used in teaching, methods of teaching and assessment and the evaluation of educational methods in pre-school institutions, primary and secondary schools (public and private). The purpose of external evaluation is to set up a system of evaluation of all the elements of the *National Curriculum Framework* and the creation of a good foundation for their development.

External evaluation also pertains to the educational institutions. Monitoring, supervision and evaluation of work of pre-school institutions, primary and secondary schools is also a prerequisite for enhancing the quality of the education system.

The *National Curriculum Framework* presupposes the evaluation of all curriculum elements and of all the implementers of educational work at educational institutions.

Details regarding external evaluation and the use of the results of evaluation of educational institutions are set out in a special regulation.

2. Self-Evaluation of Educational Work

Self-evaluation is a process of permanent monitoring, analysing and assessing of the work of educational institutions and all its contributing factors. It is implemented by schools. The concept of self-evaluation is based in the idea that implementers of educational work in pre-school institutions and schools are most familiar with the specific circumstances in those institutions, and are therefore best equipped to identify the strengths of their institutions and possible weaknesses. What is also implied is that, by working together, they can set, and then also implement, objectives contributing to the enhancement of the quality of educational work. The self-evaluation process should involve, in addition to the employees of pre-school and school institutions, students, parents, representatives of the local community, administrative and professional services and others. Their opinion will offer a wider perspective on the education provided by those institutions and facilitate better development of those institutions.

Self-evaluation is a mechanism for the development of education and the enhancement of the quality of the education system.

In the early stage of the introduction of external evaluation into the Croatian education system, performance in the examinations was one of the real indicators of the work of schools. Furthermore, alongside the results of external evaluation, implementers of education take into consideration other relevant elements of quality (the quality of teaching, school atmosphere and all relationships in the school, material conditions and management, pedagogical standards). Based on that information, implementers jointly plan and lay down guidelines for the improvement of quality of schools.

In their work they use all the information provided by schools and, as required, they also use other sources of information (e.g. questionnaires) that may provide deeper insight into various aspects of the school status.

The role of self-evaluation is to instigate a public debate on the quality of education in pre-school institutions, primary and secondary schools between all the implementers and beneficiaries. Professional and public debates are vital in planning and designing the strategy for the enhancement of the quality of pre-school and school institutions.

Both pre-school and school institutions are obliged to use all available information and bear responsibility for their own development and progress.

Self-evaluation provides a big positive impetus to the development of the education plan and thereby clearly contributes to the development of educational institutions and the enhancement of the quality of the education system. It also contributes to the improvement of the standard of learning and teaching, helps students in the process of acquiring required knowledge and competences, and achieve better test results. *The National Centre for External Evaluation of Education* conducts national examinations. It delivers the results to schools and encourages schools to carry out self-evaluation by providing assistance and support in the form of materials, advice and necessary training in the area of external evaluation and self-evaluation.

External evaluation and self-evaluation will give better insight into the existing state of affairs, and set the groundwork for devising education policy and introducing changes with respect to specific elements of the national curriculum.



