The presentations offered by The Educated Choices Program provide support for teaching and learning of the following standards:

### Law Program - tech path, specialist courses, High School

#### Theme 1
What is the Law?

The student is able to
- explain and distinguish the functions of law
- verify the characters of the rule for a given rule of law
- identify the source of a rule of law
- distinguish between the different institutions
- explain the meaning and scope of a court decision
- legally qualify a de facto situation.

#### 1.1. The Right and Functions of the Law
- Rule of law
- Secularism
- Equality
- Freedom
- Solidarity.

#### Law functions
- Distinction between right and moral
- Public order
### Theme 2

#### How does the law make it possible to settle a dispute?

<table>
<thead>
<tr>
<th>The student is able to</th>
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</thead>
<tbody>
<tr>
<td>identify the elements of a dispute</td>
</tr>
<tr>
<td>- parties</td>
</tr>
<tr>
<td>- facts</td>
</tr>
<tr>
<td>- claims</td>
</tr>
<tr>
<td>- question of law</td>
</tr>
<tr>
<td>determine by means of argument whether the dispute is caused by an act or by a legal fact in order to consider an appropriate mode of proof</td>
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<tr>
<td>assess the probative value of a piece of evidence in a given situation</td>
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<tr>
<td>determine the court that issued a court decision</td>
</tr>
<tr>
<td>select the court likely to judge a dispute</td>
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</tbody>
</table>

France Educational Curriculum Standards, last updated (December 13, 2022)
• distinguish between the role of the civil trial and the criminal trial
• identify the phases of a trial
• explain the stakes of the constitution of a civil party

2.1. The litigation
• Dispute
• Plaintiff
• Defendant
• Claims
• Amicable agreement.

2.2. The proof
• Legal act and fact
• Presumption
• Charge and method of proof
• Electronic evidence
• Authentic act and under private signature
• Testimony
  ○ Confession.
• Intimate conviction of the judge

2.3. The appeal to the judge
• Remedies
• Call.
• Appeal in cassation
• Civil party
• Instance
• Hearing
• Judgment
  ○ judgment
<table>
<thead>
<tr>
<th>Theme 3</th>
<th>The student is able to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who can claim their rights?</td>
<td>identify and qualify a legal person</td>
</tr>
<tr>
<td></td>
<td>distinguish between a natural person and a legal person</td>
</tr>
<tr>
<td></td>
<td>analyze the consequences of legal personality</td>
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<td></td>
<td>identify the attributes of a natural person or a legal person</td>
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<tr>
<td></td>
<td>explain the consequences of the legal incapacity of a natural person or moral</td>
</tr>
</tbody>
</table>

3.1. The legal person
- 3.1.1. The natural person
- 3.1.2. The legal person
- Gender
- Name/denomination
- Residence/Headquarters
- Property rights and extra-patrimonial
- Pet status

3.2. The capacity and incapacity
- Legal capacity – incapacity
- Mechanisms of representation
- Deed of disposal, deed administration

3.3. The patrimony inheritance

France Educational Curriculum Standards, last updated (December 13, 2022)
<table>
<thead>
<tr>
<th>Theme 4</th>
<th>The student is able to</th>
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<tbody>
<tr>
<td>What are the recognized rights of individuals?</td>
<td>- distinguish between patrimonial rights and extra-patrimonial rights</td>
</tr>
<tr>
<td></td>
<td>- identify an infringement of an extra-patrimonial right</td>
</tr>
<tr>
<td></td>
<td>- apply the rules relating to extra-patrimonial rights in a situation data</td>
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<tr>
<td></td>
<td>- explain the issues of the protection of personal data</td>
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<tr>
<td></td>
<td>- verify compliance with the obligations relating to the protection of personal data</td>
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<tr>
<td></td>
<td>- distinguish between tangible and intangible property</td>
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<td></td>
<td>- identify the attributes and characteristics of the property right</td>
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<td></td>
<td>- qualify an abnormal disturbance of the neighborhood</td>
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<td></td>
<td>- identify the components of copyright</td>
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<td></td>
<td>- know the stakes of the legal protection of the commercial mark</td>
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<tr>
<td></td>
<td>- identify the consequences of unauthorized use of a trademark filed</td>
</tr>
</tbody>
</table>

4.1. Extra Patrimonial Rights
- Human rights
- Data protection of personal character
- Privacy
- Image rights

4.2 Property Law
- 4.2.1. Property rights concerning bodily goods
- 4.2.2. Property rights concerning
  - intangible goods
  - Tangible property
    - "usus", "fruitful", "abuse" absolute characters, exclusive and perpetual property rights.
- Abnormal disorder of neighborhood
- Trademark
- Industrial property
Life & Earth Sciences, High School

The Earth, Life and the Organization of Living Organisms

Multicellular organism cells differentiate to form a set of specialized cells

Objectives
- students learn that specialized cells have a particular function in the organism
  - in connection with their organization
  - that the molecular structure of the DNA allows information to be conveyed.
- As part of the study of cells organized into tissues, it is expected that the existence of an extracellular matrix is known
  - consists of different molecules which, for the most part, allow cell adhesion
  - the molecules involved need not be detailed.

Abilities
- Make and/or observe microscopic preparations showing animal cells or plants.
- Observe and analyze electron microscopy images
- Distinguish the different scales of life by giving the order of magnitude

France Educational Curriculum Standards, last updated (December 13, 2022)
### Cell metabolism

**Objectives**
- the study of some metabolic reactions, including photosynthesis, reveals that living beings exchange matter and energy with their environment (environment, other organization)
- Metabolic pathways are interconnected by molecules’ metabolic intermediates.

**Abilities**
- Experiment with metabolic reactions to characterize them
- Implement experiments to identify substrates and products of metabolism
- Map the flows of matter and energy within an organism, between the organisms and with the environment

### Scales of biodiversity

**Objectives**
- the achievements of the college are mobilized by the study of biodiversity at different scales.
- The definition of the notion of species has as its main criterion the fact that individuals of the same species can interbreed and produce viable offspring and fertile.
### Abilities
- During field trips, identify, quantify and compare biodiversity interindividual, specific and ecosystemic
- Implement statistical sampling protocols allowing rigorous descriptions regarding biodiversity
- Follow a biodiversity study campaign (expeditions, participatory science, etc.) and/or participate
- Characterize the phenotypic variability in a common animal or plant species and consider the causes of this variability
- Use DNA sequence comparison software to identify and quantify the allelic variability within a species or between two related species.

### Biodiversity changes over time.

### Objectives
- a link is established between the observation of a rapid evolution through examples present and the variations of planetary biodiversity on the scale of geological time and in interaction with environmental changes
- Students learn that biodiversity is constantly evolving and that its evolution includes random events
- Some possible causes of a biological crisis causing disturbances are presented.

### Abilities important to the functioning of ecosystems.
- Extract and relate information showing current examples of genetic or speciation diversifications
  - populations of mosquitoes resistant to insecticides
  - speciation of Galapagos finches, etc.
- Study the evolution of biodiversity during the Cretaceous-Paleocene crisis
  - in particular with the group of archosaurs
  - marine foraminifera (micro-organisms).
Consider the effects of contemporary human practices on biodiversity (6th biological crisis) as an example of species interactions directing the evolution of biodiversity.

Mobilize the achievements of the college on the tree of life by positioning, for example, current or fossil organisms encountered during activities or outings (history museums and natural museums, etc).

The evolution of biodiversity over time is explained by evolutionary forces working at the population level.

**Objectives**
- To illustrate genetic drift and selection on a short time scale in order to show that evolution can be rapid.

**Abilities**
- Use modeling software and/or extract and relate information to illustrate natural selection and genetic drift over short periods of time.
- Reflect on the consequences of the random appearance of mutants on dynamics of a population.
- Situate in time some major scientific discoveries on evolution.
- Explain the approach on which a scientific theory is based based on the work carried out on developments in this topic.

**Intraspecific communication and sexual selection**

**Objectives**
- To evoke the diversity of communication methods without describing the mechanisms in detail.
- To illustrate other elements of natural selection (sexual selection).

**Abilities**
- Implement a study strategy of an example of intraspecific animal communication (if possible in real conditions).
- Analyze experiences showing how certain modes of communication have been selected, whether for survival or reproduction
- Analyze with a critical eye the advantage of certain extravagant sexual characteristics from the point of view of natural selection
- develop attributes related to reproduction in the male (peacock tail, horns of bovids or beetles, etc.).

<table>
<thead>
<tr>
<th>The contemporary challenges of the planet</th>
<th>Erosion, Process and Consequences</th>
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</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td></td>
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<tr>
<td>- Students understand that a landscape inevitably changes over time caused by erosion</td>
<td></td>
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<tr>
<td>- they identify the agents of erosion and their importance.</td>
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<tr>
<td><strong>Abilities</strong></td>
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<tr>
<td>- Describe the geological component of a local landscape with its reliefs, slopes and breaks in slope</td>
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<tr>
<td>- Propose hypotheses on their origins. Connect reliefs and water circulation</td>
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<td>- Extract data, from the observation of a local landscape</td>
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<td>- in a direct way (observations, surveys, etc.)</td>
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<tr>
<td>- and/or</td>
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<tr>
<td>- indirect (satellite imagery)</td>
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<tr>
<td>- Relate the nature of the rock to its resistance to weathering.</td>
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<tr>
<td>- Link the intensity of the alteration with the importance of the relief and the climatic conditions</td>
<td></td>
</tr>
<tr>
<td>- Study and model the mechanisms of landscape erosion (physiochemical alteration, transport)</td>
<td></td>
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<tr>
<td>- Study and identify the solid fraction and the soluble elements transported by the courses of water</td>
<td></td>
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</tbody>
</table>
- Relate the power of a watercourse to its capacity to transport solid elements
- Identify by chemical tests soluble elements resulting from weathering
- Link the intensity of erosion with the dynamics of living organisms and soils

### Sedimentation and sedimentation media

**Objectives**
- This theme describes the transition from sediment to sedimentary rock by taking the example of detrital rocks.

**Abilities**
- Study, in particular in microscopy, some detrital sedimentary rocks in order to
  - deduce the nature of the sedimentary particles
  - deduce their morphology
  - deduce the nature of the binder
- Reconstitute a paleo-environment of sedimentation from the study of a rock sedimentary, by applying the principle of actualism

### Erosion and human activity

**Objectives**
- Students understand that erosion has implications in their lives for all days, both from
  - the point of view of materials useful to humanity and
  - the risks associated with erosion.

**Abilities**
- Identify the products of erosion/sedimentation used by humanity to meet its needs in everyday materials
- Identify areas of erosion (deserts, coastlines, soils, landslides) and the risks associated, such as the means of prevention implemented
- Use databases or images to quantify the importance of current erosion mechanisms and possibly the part linked to human activities

Structure and operation of agrosystems

**Abilities**

- Identify, extract and organize information from the field (visit of a farm agriculture, for example), to characterize the organization of an agrosystem
  - elements components (nature of crops or livestock)
  - interactions between the elements (human interventions)
  - flow of matter (including water) and energy in the agrosystem
  - system inputs and outputs (light, harvest, etc.).
- Understand that the organization of an agrosystem depends on the choices of the farmer and the environmental constraints, and that these choices tend to define a terroir.
- Understand how the inputs have made it possible to quantitatively manage the nutrient needs of the population, while having qualitative consequences on environment and health
- Carry out measurements and/or use biomass and production databases agriculture to understand the difference between
  - the notion of agricultural yield (used in agriculture instead of production)
  - and
  - the notion of ecological efficiency

Soil characteristics and biomass production

**Objectives**

- The organization, composition and origin of soils are studied from a local example
- The influence of the nature of the subsoil on the characteristics of the...
soil is established.

**Abilities**
- Understand (manipulation, extraction, organization of information) the methods of soil formation
- Use simple species identification tools to discover the diversity of beings living organisms in the soil and their organization into food webs
- Experiment to understand (from the composition of fertilizers) the importance of soil mineral elements in biomass production
- Design and conduct experiments to understand the recycling of soil biomass

**Towards sustainable management of agrosystems**

**Abilities**
- Identify, extract and organize information from the field (visit of a farm agriculture, for example), to characterize the organization of an agrosystem
  - Elements components (nature of crops or livestock)
  - Interactions between the elements (human interventions, flow of matter (including water) and energy in the agrosystem).
  - Interventions humaines, flux de matières (y compris l'eau) et d'énergie dans l'agrosystème), system inputs and outputs (light, harvest, etc.)
● Understand that the organization of an agrosystem depends on the choices of the farmer and the constraints of the environment, and that these choices tend to define a terroir
● Understand how the inputs have made it possible to quantitatively manage the nutrient needs of the population, while having qualitative consequences on environment and health.
● Carry out measurements and/or use biomass and production databases agriculture to understand the difference between the notion of agricultural yield (used in agriculture instead of production) and the notion of ecological efficiency.

Soil characteristics and biomass production
Objectives:
● The organization, composition and origin of soils are studied from a local example
● The influence of the nature of the subsoil on the characteristics of the soil is established

Abilities
● Understand (manipulation, extraction, organization of information) the methods of soil formation
● Use simple species identification tools to discover the diversity of beings living organisms in the soil and their organization into food webs
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<tr>
<th><strong>Towards sustainable management of agrosystems</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
</tr>
<tr>
<td>● Through the scientific approach, the students apprehend a problem related to the environmental impact of an agrosystem and consider realistic and valid solutions.</td>
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<tr>
<td><strong>Abilities</strong></td>
</tr>
<tr>
<td>● Study, within the framework of a project approach, models of agrosystems to understand their interests and their possible environmental impacts (fertility and erosion soils, choice of crops, development of new varieties, loss of biodiversity, soil and water pollution, etc.)</td>
</tr>
<tr>
<td>● Adopt a scientific approach to consider realistic solutions to some of these issues</td>
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<tr>
<td>● Understand the mechanisms of production of scientific knowledge and the difficulties it faces (complex systems, conflicts of interest, etc.).</td>
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<table>
<thead>
<tr>
<th><strong>Human body and health</strong></th>
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<tbody>
<tr>
<td><strong>Human body</strong></td>
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<tr>
<td><strong>From Fertilization to Puberty</strong></td>
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<tr>
<td><strong>Abilities</strong></td>
</tr>
<tr>
<td>● Extract and use information from different documents and/or carry out microscopic observations and/or implement a historical approach, to Identify ○ the relationships between genetic sex and anatomical and physiological organization ○ the functioning of the genitals throughout life ○ Translate certain mechanisms into functional diagrams.</td>
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<table>
<thead>
<tr>
<th><strong>Brain, Pleasure, Sexuality</strong></th>
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<tbody>
<tr>
<td><strong>Abilities</strong></td>
</tr>
<tr>
<td>● Identify brain structures that participate in reward processes from medical and experimental documents and data</td>
</tr>
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</table>
| ● Differentiate, from the confrontation of biological data and
<table>
<thead>
<tr>
<th>Representations Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ gender identity, roles as gendered individuals and their stereotypes in society, which fall within the social space</td>
</tr>
<tr>
<td>○ sexual orientation, which is a personal matter</td>
</tr>
<tr>
<td>● Make evolutionary comparisons with the reproductive behaviors of other mammals</td>
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<table>
<thead>
<tr>
<th>Abilities</th>
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<tbody>
<tr>
<td>● Implement a method (historical approach)</td>
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<tr>
<td>○ Use software (example: visualization of molecular models, augmented reality)</td>
</tr>
<tr>
<td>○ Practice documentary to explain the mode of action of exogenous molecules acting as &quot;decoys&quot;</td>
</tr>
<tr>
<td>● Identify, extract and organize information to link the causes of infertility or of infertility to the choice of methods of medically assisted procreation</td>
</tr>
<tr>
<td>● Extract and use data to link prevention against STIs (AIDS, hepatitis, papillomavirus, etc.) to vaccination or the use of condoms</td>
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<tr>
<td>● Show the biotechnological applications resulting from scientific knowledge</td>
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<table>
<thead>
<tr>
<th>Abilities</th>
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<tbody>
<tr>
<td>● Exploit databases to know the distribution, prevalence or the impact in terms of public health of a directly transmitted disease and/or vector</td>
</tr>
<tr>
<td>● Use data from the history of science to understand the discovery diseases linked to directly and/or vector-borne pathogens and their treatments</td>
</tr>
<tr>
<td>● Observe blood smears of individuals with malaria</td>
</tr>
<tr>
<td>● Observe the mouth apparatus of insect vectors of pathogenic agents</td>
</tr>
<tr>
<td>● Use documents showing methods of combating vector-borne diseases</td>
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France Educational Curriculum Standards, last updated (December 13, 2022)
| Human Microbiota and Health | in France is in the world
| | – Identify, in the case of HIV, the behaviors that limit the spread of the disease
| | – Apply the knowledge acquired to other examples chosen for their local interest or public health
| | – enable students to practice the skills expected on other cases of diseases (chikungunya, dengue fever, Lyme disease, toxoplasmosis, etc.)

**Abilities**

- Calculate the proportion of microbes present in an individual compared to its number of cells
- Observe a smear of bacteria from the microbiota of vertebrates
- Exploit historical experiments establishing relationships between bacteria and health
- Analyze, compare, criticize information on the scientifically proven effects of microbiota and on the use of microbiota in human health
- Know how to assess the necessary hygienic precautions as accurately as possible (frequency and relevance of hand washing and use of hydro-alcoholic gels)