



# Syllabus for Sustainable Development

## Syllabus Structure





## Syllabus structure

With reference to the methodological framework a proposal of a possible common syllabus structure is provided. The syllabus must be adapted to the national context and to the specific needs of the school and students.

The total number of hours for the 2 years should be at least 60. The recommended number of hours per year is 30 according to the following distribution.

| Macroareas     | Number of hours dedicated to Environmental and Sustainable Development |                               |
|----------------|--|-------------------------------|
|                | during the first school year   | during the second school year |
| STEM           | 14 - 18  | 14 - 18                       |
| Social Science | 10 – 14  | 10 – 14                       |
| Humanities     | 6 – 8  | 6 – 8                         |

A complete description should be provided for each year according to the structure below.

|  |  |
|--|--|
| <b>School Year</b><br><i>Single Choice</i> | <input type="checkbox"/> First School Year <input type="checkbox"/> Second School Year   |
| <b>Themes</b><br><i>Multiple choice</i>    | Key themes proposed by UNESCO (2018) <sup>1</sup> :<br><input type="checkbox"/> Climate Change <input type="checkbox"/> Biodiversity<br><input type="checkbox"/> Global Justice <input type="checkbox"/> Sustainable Production and Consumption<br><input type="checkbox"/> Poverty Reduction <input type="checkbox"/> Disaster Risk Reduction   |
| <b>Description</b>                         | <i>Starting from the definition of the macroareas provided below it is necessary to define their contribution to the exploration and analysis of environmental and sustainable development issues in connection with the themes chosen above.</i> <ul style="list-style-type: none"> <li>• STEM: Science, Technology, Engineering and Mathematics field should contribute to the understanding of the biophysical bases of the problematic theme under study.</li> <li>• Social Science: Social Sciences field should contribute to the understanding of the social causes and implications of the problematic theme under study.</li> <li>• Humanities: Humanistic and Linguistic field should be the vector or the media for informing and transforming students to become active actors in the face of the problematic theme under study</li> </ul> |
| <b>Learning Outcomes</b>                   | By the end of Year 2 the student should be able to acquire the appropriate knowledge, skills and competences according to the recommendations of the European Framework for Key Competences for Lifelong Learning and the sustainability competences within the GreenComp framework.<br><br><i>Define here the learning outcomes to be achieved within the selected year considering the following definitions:</i>  |

<sup>1</sup> UNESCO (2018). Issues and trends in education for sustainable development. UNESCO publishing.  
Retrieved from: <https://unesdoc.unesco.org/ark:/48223/pf0000261803>





|                                      |  |
|--------------------------------------|--|
|                                      | <ul style="list-style-type: none"> <li>• The term “<b>knowledge</b>” means the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study;</li> <li>• The term “<b>skills</b>” means the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments). <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32017H0615(01)&amp;from=EN#d1e32-20-1">https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32017H0615(01)&amp;from=EN#d1e32-20-1</a></li> <li>• The term “<b>competencies</b>” means the proven ability to use knowledge, skills and personal, social and/ or methodological abilities, in work or study situations and in professional and personal development.<br/>For this project, we suggest to refer to the 12 Green Competences: <a href="https://joint-research-centre.ec.europa.eu/greencomp-european-sustainability-competence-framework/greencomp-conceptual-reference-model_en">https://joint-research-centre.ec.europa.eu/greencomp-european-sustainability-competence-framework/greencomp-conceptual-reference-model_en</a>.</li> </ul> |
| <p><b>Teaching Methodologies</b></p> | <p>Define here the methodologies to be used. Possible examples are:</p> <ul style="list-style-type: none"> <li>• <i>Problem-based Learning is an innovative educational methodology, characterised by the fact that learning is student-centred, making it meaningful. It also seeks to develop a series of skills and competences that are indispensable in today's professional and social environment. The process is developed on the basis of small working groups, which learn collaboratively in the search to solve an initial, complex and challenging problem, posed by the teacher. The aim is to trigger self-directed learning in the students. The role of the teacher becomes that of a facilitator of learning .</i></li> <li>• <i>Cooperative Learning is a didactic strategy based on the organization of the class in small groups where students work in a coordinated way to solve academic tasks and develop their own learning. Usually students work for one class period to several weeks to achieve shared learning goals and complete jointly specific tasks and assignments (such as decision making or problem solving)</i></li> <li>• <i>Others: e-learning, Flipped classroom, Peer learning...</i></li> </ul>  |
| <p><b>Teaching Organization</b></p>  | <p>Please, specify the teaching organization to be used, such as:</p> <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Seminars and Tutorials</li> <li>• Independent Study</li> <li>• Laboratory and Practical Study</li> <li>• Field Trips</li> <li>• Others</li> </ul>   |
| <p><b>Assessment Methodology</b></p> | <p>Taking into consideration that:</p> <ul style="list-style-type: none"> <li>• <i>The assessments should be mainly formative,</i></li> <li>• <i>Implemented by means of teacher observation, tests, and self-assessment, and the solutions students propose to different socio-scientific dilemmas, students acquire an awareness of their level and their progress throughout the course</i></li> <li>• <i>Pre and Post tests result comparisons are particularly useful in demonstrating the progress of the students as a before and after assessment measures whether the expected changes took place in the participants in a lesson.</i></li> <li>• <i>A standard test, survey, or questionnaire should be applied before participation begins (pre-test or baseline), and re-applied after a set period, or at the end of the program (post-test or endline).</i></li> <li>• <i>Pre- and post-tests can be given in writing or orally.</i></li> </ul>  |





|   |  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
|---|--|----------------------------------|---|------------------------------------|------------------------------------|--------------------------------------|---------------------------------|------------------------------------|-----------------------------------|----------------------------------|---|-------------------------------------|-------------------------------|-------------------------------------|---|----------------------------------|--|-------------------------------------|--|
|   | <p>Please define the assessment methodologies and tools to be used. The use of the Attainment Descriptors listed in the <a href="#">assessment grid</a> in the different assessment modalities is a recommended reference tool.</p>  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <p><b>Possible Topics / Challenges</b></p>                    | <p>Considering tha:</p> <ul style="list-style-type: none"> <li>• topics should be related to everyday aspects of young people's lives, such as decision making, origin, consequences on diet, clothing, transport... and their relationship with people in other latitudes.</li> <li>• The aim is to provide students with complex and challenging problems that require research, analysis and problem solving to help them develop critical thinking skills and find relevance in what they are learning.</li> </ul> <p>Please, specify the possible topics / challenges to be analyzed by the teachers during their lessons.</p>  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <p><b>Possible subjects</b></p> <p><i>Multiple choice</i></p> | <table> <tr> <td><input type="checkbox"/> Biology</td> <td><input type="checkbox"/> Business Studies</td> </tr> <tr> <td><input type="checkbox"/> Chemistry</td> <td><input type="checkbox"/> Economics</td> </tr> <tr> <td><input type="checkbox"/> Engineering</td> <td><input type="checkbox"/> Ethics</td> </tr> <tr> <td><input type="checkbox"/> Geography</td> <td><input type="checkbox"/> Graphics</td> </tr> <tr> <td><input type="checkbox"/> History</td> <td><input type="checkbox"/> Home Economics</td> </tr> <tr> <td><input type="checkbox"/> Literature</td> <td><input type="checkbox"/> Math</td> </tr> <tr> <td><input type="checkbox"/> Philosophy</td> <td><input type="checkbox"/> Physical Education</td> </tr> <tr> <td><input type="checkbox"/> Physics</td> <td><input type="checkbox"/> Religious studies</td> </tr> <tr> <td><input type="checkbox"/> Technology</td> <td></td> </tr> </table> | <input type="checkbox"/> Biology | <input type="checkbox"/> Business Studies | <input type="checkbox"/> Chemistry | <input type="checkbox"/> Economics | <input type="checkbox"/> Engineering | <input type="checkbox"/> Ethics | <input type="checkbox"/> Geography | <input type="checkbox"/> Graphics | <input type="checkbox"/> History | <input type="checkbox"/> Home Economics | <input type="checkbox"/> Literature | <input type="checkbox"/> Math | <input type="checkbox"/> Philosophy | <input type="checkbox"/> Physical Education | <input type="checkbox"/> Physics | <input type="checkbox"/> Religious studies | <input type="checkbox"/> Technology |  |
| <input type="checkbox"/> Biology                              | <input type="checkbox"/> Business Studies  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> Chemistry                            | <input type="checkbox"/> Economics   |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> Engineering                          | <input type="checkbox"/> Ethics  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> Geography                            | <input type="checkbox"/> Graphics  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> History                              | <input type="checkbox"/> Home Economics  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> Literature                           | <input type="checkbox"/> Math  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> Philosophy                           | <input type="checkbox"/> Physical Education  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> Physics                              | <input type="checkbox"/> Religious studies   |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <input type="checkbox"/> Technology                           |  |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |
| <p><b>Lesson Plans</b></p>                                    | <p>Please choose the lesson plans from the ones available on the portal at <a href="https://go-green.pixel-online.org/lesson_plan.php">https://go-green.pixel-online.org/lesson_plan.php</a></p>   |                                  |   |                                    |                                    |                                      |                                 |                                    |                                   |                                  |   |                                     |                               |                                     |   |                                  |  |                                     |  |

