

**Module:** Mathematics and Environment

**Number of credits:** 10

**Subjects:**

- 1) Mathematics Education and Methodology 1
- 2) Mathematics Education and Methodology 2
- 3) Environmental Education and Methodology
- 4) Health Education

<b>Name of subject:</b> Enviromental Education and Methodology	<b>Credits:</b> 4
<b>Subject Classification:</b> Compulsory	
<b>Division of course content in theory and practice:</b> 60% practice and 40% theory	
<b>Types and number of lessons:</b> 20 seminars per semester <i>Language:</i> English <b>Other methods used during the course:</b> <ul style="list-style-type: none"><li>• course outline available electronically</li><li>• sharing the good practices of international partner institutions through online interface</li><li>• use of online internet resources</li></ul> digital course material provided through electronic learning system	
<b>Method of assessment:</b> term mark <b>Other means of learning evaluation:</b> <ul style="list-style-type: none"><li>• continuous, active participation during lessons</li><li>• oral assessment of the acquired the linguistic material</li><li>• preparation of ppt presentations for use in classroom</li><li>• completion of preschoolactivity plans</li></ul>	
<b>Place of subject in the curriculum:</b> 3rd semester	
<b>Prerequisites:</b> none	

**Course description:**

The solar system. The Earth as space, srtructure of the Earth. The Moon. Night and day, seasons, weather, rain and snow, humidity, dew and frost. Rock detectives. The classification of living things. Plant and animal life phenomena. Energy and the enviroment. The diversity of wildlife. Habitat and sustainability. A changing enviroment. Nature's warning: acid rain, deforestation, river pollution. Materials. Removing nature's waste. Supporting young children's scientific learning. Creating the contexts for scientific learning. Education from the environment, about the environment, for the environment.

During the course we touch upon the concept of sustainable development as a principle of system organization: the comprehensive and restorative harmonization of the satisfaction of the needs of present and future generations. We deal with questions like how to synchronize the sustainability of the environment with economic development, with social equality and justice. In addition, we deal with questions pertaining to environmental, accident, work and consumer protection.

During the course we deal with the concepts of digital footprint and cyber bullying. One of the aims of the course is to call attention to settings and regulations that allow a safe use of the Internet. A special emphasis is given to the hidden dangers of the social media.

**Required and recommended literature:**

- Pat Brunton-Linda Thronton: Science in the Early Years. SAGE 2010. ISBN 978-1-84860-142-0
- Jane Devereux: Science for Primary and Early Years: Developing Subject Knowledge. SAGE 2013. ISBN 978-1412946124
- Wynne Harlen-Anne Qualter: The Teaching of Science in Primary Schools. Routledge 2014. ISBN 10:0-415-46527-3

**Required competencies and competency elements that this subject contributes to and helps to develop**

○ **Knowledge**

- Students possess the expert knowledge and teaching methodology which help to develop the health and personality of children aged 3-7 in a harmonious and complex way.
- Know the basic documents of preschool education and show awareness of the general aims and responsibilities of preschool education as well as the content of the different activity forms, and the connections between all these.
- Are aware of the basic principles and practical aspects of health improvement and sustainable development relating to environmental and consumer protection, and work and safety standards in the workplace.

○ **Capabilities**

- Adapt their pedagogical, psychological, sociological and methodological expertise as well as a holistic approach to preschool education with consideration to the characteristics of the child and the child's age group.
- Can support the harmonious personality development of children aged 3-7, and the shaping of their physical, social, and mental skills age-specifically.
- Know and understand the professional, ethical, and legal documents regulating preschool education, and can apply the relevant passages in their everyday work.
- Possess knowledge of effective electronic information search, information processing, information research, information transmission; and can use electronic resources.

○ **Attitude**

- Show commitment to developing strategies, methods and activities promoting the organization and expansion of the experience and knowledge of children aged 3-7, and to creating an environment promoting the success of English language communication in educational activities while inspiring, confirming the development of the child's personality.
- Show commitment to the complete health development of children aged 3-7.

- Have a creative, critical and innovative attitude towards information literacy; and can use 21<sup>st</sup> century culture of literacy effectively.
- Take a responsible and proactive role in the implementation of the theory and practice of health improvement and sustainable development in the interests of their profession and community.

**d)Autonomy and Responsibility**

- Take responsibility for the personality development of children aged 3-7 in a harmonious and complex way, and for all the staff and equipment arrangements necessary to enhance healthy mental and physical development.
- Take responsibility for their decisions and the consequences of their pedagogical activity during the educational process.
- Has a conscious, critical, self-reflective, and innovative attitude towards the development of digital culture.
- Can take responsibility for their views regarding health improvement and the principles of sustainable development in their special field;

**Responsible for course: Both Mária college professor, PhD**

**Other teacher involved in course: Palkóné dr. Tabi Katalin, college associate professor, PhD**