

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

Name of subject: Enviromental Education and Methodology	Credits: 4
Subject Classification: Compulsory	
Division of course content in theory and practice: 60% practice and 40% theory	
Types and number of lessons: 20 seminars per semester <i>Language:</i> English Other methods used during the course: <ul style="list-style-type: none">• course outline available electronically• sharing the best practices of international institutions• use of online internet resources• reading secondary literature• experiential learning (visiting an arboretum)	
Method of assessment: term mark Other means of learning evaluation: <ul style="list-style-type: none">• continuous, active participation during lessons• oral assessment of the acquired the linguistic material• preparation of ppt presentations for use in classroom• completion of preschool activity plans	
Place of subject in the curriculum: 3rd semester	
Prerequisites: 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. Preparing an environmental project plan.

Required and recommended literature:

- Pat Brunton-Linda Thronton:Science in the Early Years. SAGE 2010. ISBN 978-1-84860-142-0
- Cutter-Mackenzie, Amy et al. (2014). *Young Children's Play and Environmental Education*

in Early Childhood Education. Springer. ISBN 978-3-319-03740-0

- 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
- Salaman, Anna & Tutchell, Suzy (2005). *Planning Educational Visit for the Early Years*. Paul Chapman Publishing. ISBN 1-4129-1926-6
- Moomaw, Sally (2013). *Teaching STEM in the Early Years*. Redleaf Press.

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

a) Knowledge

- 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.

b) 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.

c) 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.

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.

Responsible for course: Both Mária college professor, PhD

Other teacher involved in course: Katalin Palkóné Tabi college associate professor PhD