

**Table 5.2** Course specification

<b>Level:</b> Bachelor
<b>Course title:</b> Cell and Tissue Biology
<b>Status:</b> obligatory
<b>ECTS:</b> 5
<b>Requirements:</b> none
<b>Course aim</b> Goal of this course is to introduce students with the main structural and ultrastructural characteristic of animal cells and tissues.
<b>Course outcome</b> Students should able to demonstrate basic understanding of fundamental ultrastructural elements of cell and structural elements of tissues.
<b>Course content</b> <i>Theory</i> 1. Cell biology: General characteristics and evolution of cell. Cell membrane. Cytoplasm. Membranous and Nonmembranous Organelles (Centriol. Ribosomes. Endoplasmatic reticulum. Golgi apparatus. Lysosomes. Peroxisomes. Mitochondria, Cytoskeleton, Cilia and Flagella. Nucleus). Cytoplasmatic inclusions. Cell Cycle. Aging of Cell. Cell Death. Tissues biology: Epithelial tissues. Muscle tissue. Connective tissue. Nerve tissue.  <i>Practice: Practical classes, OFT, SRW</i> Laboratory practice covers: studies using electronmicrographics of the animal cell organelles and light microscopy examinations of the structure of animal tissues (epithelial tissue, connective tissue, muscle tissue, nerve tissue) using permanent preparations – slides.