Subject name | Animal and Human Physiology and Endocrinology
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Subject code | H.KFZa.ANI9.SI.HZOXY
Department | Animal Physiology and Endocrinology
Faculty | Animal Sciences
Subject supervisor/Lecturer | Professor Krystyna Koziec

**General information**

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| semester | winter |
| ECTS credits | 8 |
| Lectures total | 20 hrs |
| Laboratories | 30 hrs |

The course is divided into two parts: first-only lectures students are obliged to learn the main topics of physiology: nervous system, blood system, immunology, respiration, gastrointestinal physiology, reproduction and endocrinology. During the second parts students will prepare seminars (presentations) on specific topics chosen from the list. Invited speakers will have lecture about modern physiological methods.

**Lectures:**

- Cells and their function. Physiology of Cell membranes
- Immunity. Autoimmunological diseases
- Central nervous system
- Physiology of senses: vision, hearing, pain, taste
- Physiology of intestinal system. Ingestion
- Growth factors
- Physiology of growth
- Physiology of water metabolism
- Physiology of pregnancy and parturition
- Physiology of adipose tissue
- Vitamins
- Physiology of muscles
- Neurophysiology of behaviour
- Physiology of lactation
- Endocrinology of metabolism

**Laboratory classes**

- Haemopoesis. Diffusion, osmosis and hemolysis
- Hematocrit test, the role of blood plasma and leukocytes
- Role of erythrocytes. Hemoglobin assay. Blood clotting
- Immunity. Blood groups
- Blood circulation
- Blood pressure. Blood pressure measurement
- Structure of nervous system. Neural conduction. Reflexes
- Structure and functions of autonomic nervous system
- Skeletal muscles and smooth muscles
- Structure of digestive system. Digestion and absorption
- Endocrinology – endocrine glands, anatomy and function
- Structure of respiratory system. Respiration and spirometry
- Processes of physiological and pathological urine formation
- Metabolism, basic metabolism, thermoregulation
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<tr>
<th>Assessment method</th>
<th>examination</th>
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| References        | Review of Medical Physiology W.F. Ganong  
                   Medical Physiology W. Guyton  
                   Generative and Comparative Physiology W. S.Hoar  
                   Williams Textbook of Endocrinology Wilson&Foster  
                   Endocrinology M.E.Hadley |