

**Course name: Basics of *in vitro* animal cell culture** (USOS Code: B-BMED.2005Eng)

**ECTS: 1**

**No. of hours:** 15 (0 lectures + 15 classes)

**Course coordinator:** Dr Mateusz Pięt

**Prerequisites:** Completed course in Cell biology

**Course description:** Basics of mammalian cell culture – types, conditions, culture media. Establishment of primary cell cultures. Subculturing of adherent and non-adherent human and mammalian cell cultures – passaging, cryopreservation. Evaluation of cell density – methods, calculations. Basic analytical methods carried on in vitro cell cultures.

**Recommended literature:** 1. Verma AS, Singh A. 2020. Animal Biotechnology. Models in Discovery and Translation (2nd ed.). Elsevier Inc.: Chapter 14 - Animal tissue culture principles and applications (Verma A, Verma M, Singh A, p. 269-293). 2. Vikas B, Fasullo M. 2019. Cell Growth. IntechOpen, London: Chapter 7 – Cell-Based Assays in Cancer Research (Vikas B, Sukumaran A). 3. Materials provided by the teacher.