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| Course title | From molecules to cells |
| Code |  |
| Value | 4 ECTS |
| Availability | One semester course, winter semester |
| Prerequisites | General knowledge in biology and chemistry |
| Teacher | **Prof. Hans Bluijssen** (coordinator) |
| Teaching method | lectures: 20h; journal club: 10h |
| Course description | The course is thought of as a brief survey of the concepts of contemporary molecular and cellular biology and biotechnology. It is composed of 9 independent topics leading the student from the structural basics of life, through the molecular machinery of the cells to some organismal aspects of biology. The topics include:  04/10: Introduction Prof. Hans Bluijssen  11/10: DNA and replication Prof. Krzysztof Lesniewicz  18/10: no meeting  25/10: no meeting  01/11: no meeting  08/11: Molecules and mechanisms of epigenetics Prof. Piotr Ziółkowski  15/11: Stem cells Prof. Małgorzata Borowiak  22/11: Ligand-transport pathways in proteins Dr. Jan Brezovsky  29/11: Transcriptomes and RNA Prof. Krzysztof Sobczak  06/12: The energy of life and death Prof. Hanna Kmita, Prof. Wieslawa Jarmuszkiewicz  13/12: Molecular Machines Prof. Mikolaj Olejniczak  17/01: Genome medicine Prof. Hans Bluijssen  24/01: Signaling in inflammation and cancer Prof. Hans Bluijssen  31/01: Exam |
| Assessment method | Written exam (multiple choice test) |

Lectures Fridays

Start: 04.10.2019, Aula; hours: 15.00-17.15

Procedure per topic/presenter: 2h (90 min.) lecture + 1h (45 min.) journal club\*

\*The articles for the journal club are available at:

www.dhmg.amu.edu.pl/ index.php/teaching/50-amu-pie