

# SELECTED TOPICS IN CELL BIOLOGY

## Medicine

### Department of Biophysics and Cell Biology

Subject: SELECTED TOPICS IN CELL BIOLOGY

Year, Semester: 2nd year/2nd semester

Number of teaching hours:

Lecture: 28

#### 2nd week:

Lecture: Receptor tyrosine kinases: multiplicity of signaling pathways.

Lecture: Regulation by compartmentation of signaling components

#### 3rd week:

Lecture: Interaction of Integrins and receptor tyrosine kinases: a pointer to therapy resistance of cancer

Lecture: From cell biology to preclinical models: CDKs as drug targets.

#### 4rd week:

Lecture 4: GFP and friends - the molecule that drew the Nobel Prize in Chemistry

#### 5th week:

Lecture 5: Apple of my eye: the corneal stem cell niche and methods for its restitution in limbal stem cell deficiency disease

#### 6th week:

Lecture: Something only your mother can give you: the mitochondrion

#### 7th week:

Lecture: Molecular targets for cancer therapy in

the signal transduction pathway of receptor tyrosine kinases

#### 8th week:

Lecture: A strict rule in multicellular development: cells must behave, otherwise their fate is apoptosis or ...

#### 9th week:

Lecture: Epigenetics at the doorstep of Cell Biology

#### 10th week:

Lecture: Cancer immunotherapy

#### 11th week:

Lecture: Ion channels: cellular physiology and disease.

#### 12th week:

Lecture: What goes up, must come down: Degrading proteins and lipids - and the consequences of aberrant pathways

#### 13th week:

Consultation. Test.

#### Reading materials:

See e-learning site

## Requirements

Neptun code: AOG157403-K1, ECTS: 2 credit points

Requirement for signature:

- maximum 3 recorded absences total (no make-up possible)

Exam dates: week 13. written exam for receiving the practical grade.

The exam can also be taken during the exam period, but this counts as a first exam after a practical grade of "fail". Check NEPTUN for dates.

Exam type: MCQ, TF, Relation analysis, fill-in, and other tests as well as short essays, written online @ exam.unideb.hu

Grading:

>50% pass

>60% satisfactory

>70% good

>80% excellent