Cancer biology I

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Summary
The course covers in detail molecular mechanisms of cancer development with emphasis on cell cycle control, genome stability, oncogenes and tumor suppressor genes.

Content
The 2x5 credit course starts in the fall semester and continues throughout the spring semester as Cancer Biology II. In the fall semester (Cancer Biology I), the following topics are covered:
- Oncogenes and tumor suppressors
- Cell cycle regulation
- Apoptosis and senescence
- Signalling pathways in cancer
- Genome maintenance and segregation
- DNA repair
- Functional genomic screens and targeted cancer therapies

Learning Prerequisites
Recommended courses
Basic knowledge of molecular biology and genetics.

Teaching methods
Ex cathedra and exercises

Assessment methods
Continuous control

Supervision
Others
Office hours by appointment only.

Resources
Bibliography
Prerequisite for
Master in life sciences & technology, specialization in molecular medicine.