

## **VMFN33, Tumor Biology and Targeted Therapy, 7.5 credits**

*Tumörbiologi och målinriktad terapi, 7,5 högskolepoäng*

**Second Cycle / Avancerad nivå**

---

### **Details of approval**

The syllabus was approved by The Master's Programmes Board on 2021-02-02. The syllabus comes into effect 2021-02-03 and is valid from the autumn semester 2021.

### **General information**

The course is intended for students and professionals who wish to gain specialised knowledge in tumour biology and targeted cancer treatments.

*Language of instruction:* English

*Main field of  
study*

*Specialisation*

Medicine

A1N, Second cycle, has only first-cycle course/s as entry requirements

### **Learning outcomes**

#### **Knowledge and understanding**

On completion of the course, the course participant should be able to:

- explain mechanisms in cancer treatment with respect to both genetic and epigenetic changes and signaling pathways
- explain cancer stem cells and the importance of the immune cells in the treatment of cancer
- describe the most relevant cancer treatments and mechanisms in drug resistance

#### **Competence and skills**

On completion of the course, the student will be able to:

- independently and in collaboration with others identify challenges related to different types of cancer treatments
- independently use information systems, reports and research material to problematise, compile, analyse and draw conclusions from these
- present current research in the subject area, orally and in writing, using a scientific approach

### **Judgement and approach**

On completion of the course, the student should be able to reflect and argue for their own position in relation to the international debate about health equality and the global sustainable development goals.

### **Course content**

The course content mainly concerns cancer treatment. The course intends to give the students an opportunity to develop their understanding of the mechanisms in tumour development and metastasising, and apply this to cancer therapy. The course also covers mechanisms behind the emergence of drug resistance in the treatment of cancer.

### **Course design**

The teaching is mainly conducted through group work and lectures. A scientific project is planned during the course in the form of a group assignment. The project is compiled, assessed and reported in the form of a report and an oral presentation. Compulsory components in the course relate to group work.

### **Assessment**

Examination is conducted through two different assessed components. Component 1 is a brief report and an individual oral presentation of a group assignment (4 credits). Component 2 is a written exam at the end of the course (3.5 credits).

Under special conditions other forms of examination may be applied.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

### **Grades**

Grading scale includes the grades: Fail, Pass

To achieve the grade of Pass, the grade of Pass must be attained in all test components.

### **Entry requirements**

Degree of Bachelor in biomedicine, natural sciences, biotechnology or medicine.