### Cancer Biology (Seminar Course in MHS / Videregående Medicinalbiologi)

Title	Cancer Biology (Seminar Course in MHS / Videregående Medicinalbiologi)
Semester	E2022
Master programme in	Medicinal biologi / Mathematical Bioscience / Molecular Health Science
Type of activity	Course
Teaching language	English
Study regulation	Read about the Master Programme and find the Study Regulations at ruc.dk
	Læs mere om uddannelsen og find din studieordning på <u>ruc.dk</u>

#### REGISTRATION AND STUDY ADMINISTRATIVE

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Rea	ist	rat	ior

Sign up for study activities at <u>stads selvbetjening</u>within the announced registration period, as you can see on the <u>Studyadministration</u> <u>homepage</u>.

When signing up for study activities, please be aware of potential conflicts between study activities or exam dates.

The planning of activities at Roskilde University is based on the recommended study programs which do not overlap. However, if you choose optional courses and/or study plans that goes beyond the recommended study programs, an overlap of lectures or exam dates may occur depending on which courses you choose.

Number of participants

The Master Programme/Institute reserves the right to cancel the course if fewer than 15 studentes are registered for the course.

ECTS 5

Responsible for the activity

Jesper Troelsen (troelsen@ruc.dk)

Head of study

Lotte Jelsbak (<u>ljelsbak@ruc.dk</u>)

Teachers

Study administration

INM Studieadministration (inm-studieadministration@ruc.dk)

Exam code(s)

U60295

#### ACADEMIC CONTENT

# Overall objective

The course covers molecular, biochemical, medical, physiological and cellular biological responses, mechanisms and adaptations.

The main emphasis is on knowledge and understanding, theory and scientific methods and oral presentation. The content of the individual courses appears in the course description on study.ruc.dk.

# Detailed description of content

The course is a theoretical course with lectures and student presentations. The course focusses on the molecular mechanisms behind cancer development, diagnosis and treatment.

#### Course material and Reading list

Selected scientific article within cancer biology

# Overall plan and expected work effort

Overall plan: in general the course is planned as followed: each session beginns with a lecturer presentation and is followed by 2-3 student presentations.

- Lectures 9 hours
- Student presentations 9 hours
- Supervisor consultation 2 hours
- Systematic review preparation 60 hours
- Preparation 55 hours
- A total of 135 hours

#### Format

# Evaluation and feedback

The course includes formative evaluation based on dialogue between the students and the teacher(s).

Students are expected to provide constructive critique, feedback and viewpoints during the course if it is needed for the course to have better quality. Every other year at the end of the course, there will also be an evaluation through a questionnaire in SurveyXact. The Study Board will handle all evaluations along with any comments from the course responsible teacher.

Furthermore, students can, in accordance with RUCs 'feel free to state your views' strategy through their representatives at the study board, send evaluations, comments or insights form the course to the study board during or after the course.

#### Programme

Hallmarks of Cancer Cancer diagnostics, development, treatment and prevention

For further detailed information see Moodle.

#### **ASSESSMENT**

# Overall learning outcomes

After completing the course, the students will be able to:

- describe core biochemical, cellular biological or physiological processes in humans
- discuss the different physiological and regulatory responses in humans to changes in the internal or external environment
- gather relevant knowledge and understanding from scientific review articles, and critically analyse new and original scientific

literature, interpret and evaluate experimental data and hypotheses in molecular biology, health science, physiology or cellular biology

- make oral presentations of scientific hypotheses, results and interpretations to fellow students
- reflect upon the latest scientific hypotheses and experiments in the course's subject area
- formulate a relevant research question and a testable hypothesis as a basis for an experimental thesis project related to health science, biochemistry, physiology or cellular biology.

# Form of examination

The course is passed through active, regular attendance and satisfactory participation.

Active participation is defined as:

The student must participate in course related activities (e.g. workshops, seminars, field excursions, process study groups, working conferences, supervision groups, feedback sessions).

Regular attendance is defined as:

- The student must be present for minimum 80 percent of the lessons.

Satisfactory participation is defined as:

- e.g. oral presentations (individually or in a group), peer reviews, mini projects, test, planning of a course session .

Assessment: Pass/Fail.

#### Form of Reexamination

Individual written take-home assignment

The character limit of the assignment is: 24,000-48,000 characters, including spaces.

The character limit includes the cover, table of contents, bibliography, figures and other illustrations, but exclude any appendices.

The duration of the take-home assignment is 7 days and may include weekends and public holidays.

Assessment: Pass/Fail.

Type of examination in special cases

Examination and assessment criteria

Satisfactory participation is defined as: Passing the course required as well one satisfactory oral presentation of a scientific article within Cancer biology and an approved systematic review within a self-chosen topic in cancer biology.

#### Assessment criteria:

- describe core biochemical, cellular biological or physiological processes in cancer biology
- discuss the different malignant responses in humans to changes in the internal or external environment
- gather relevant knowledge and understanding from scientific review articles, and critically analyse new and original scientific

- literature, interpret and evaluate experimental data and hypotheses in cancer biology
- make oral presentations of scientific hypotheses, results and interpretations to fellow students
- reflect upon the latest scientific hypotheses and experiments in the course's subject area
- formulate a relevant research question and a testable hypothesis as a basis for an experimental thesis project related to cancer biology

Regarding the reexam: During the 7 days exam period other study activities from projects or courses can appear

Exam code(s) Exam code(s): U60295

#### Course days:

#### Hold: 1

### **Cancer Biology (MHS)**

time 07-09-2022 14:15 til

07-09-2022 16:00

location 28b.0-01 - store teorirum (30)

Teacher Jesper Troelsen (troelsen@ruc.dk)

## **Cancer Biology (MHS)**

time 14-09-2022 14:15 til

14-09-2022 16:00

location 28b.0-01 - store teorirum (30)

Teacher Jesper Troelsen (troelsen@ruc.dk)

# Cancer Biology (MHS)

time 21-09-2022 14:15 til

21-09-2022 16:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt

location 28b.0-01 - store teorirum (30)

Niels Pallisgaard (npallisg@ruc.dk)

#### Teacher

# Cancer Biology (MHS)

time 28-09-2022 14:15 til

28-09-2022 16:00

location 28b.0-01 - store teorirum (30)

Teacher Jesper Troelsen (troelsen@ruc.dk)

# Cancer Biology (MHS)

time 05-10-2022 14:15 til

05-10-2022 16:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt

location 28b.0-01 - store teorirum (30)

Teacher Niels Pallisgaard (npallisg@ruc.dk)

# Cancer Biology (MHS)

time 12-10-2022 14:15 til

12-10-2022 16:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt

location 28b.0-01 - store teorirum (30)

Teacher Niels Pallisgaard (npallisg@ruc.dk)

# Cancer Biology (MHS)

time 19-10-2022 14:15 til

19-10-2022 16:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt

location 28b.0-01 - store teorirum (30)

# **Cancer Biology (MHS)**

time 26-10-2022 14:15 til

26-10-2022 16:00

forberedelsesnorm ikke valat forberedelsesnorm D-VIP ikke valgt

location 28b.0-01 - store teorirum (30)

## Cancer Biology (MHS)

time 02-11-2022 14:15 til

02-11-2022 16:00

forberedelsesnorm ikke valgt forberedelsesnorm D-VIP ikke valgt

location 28b.0-01 - store teorirum (30)

### **Cancer Biology (MHS)**

time 09-11-2022 14:15 til

09-11-2022 16:00

location 28b.0-01 - store teorirum (30)

Teacher Jesper Troelsen (troelsen@ruc.dk)

# Cancer Biology - Hand-in of written product in Digital Exam (MHS)

16-12-2022 10:00 til time

16-12-2022 10:00

forberedelsesnorm ikke valgt forberedelsesnorm D-VIP ikke valgt

## Cancer Biology - Take-home assignment (reexam) (MHS)

21-02-2023 10:00 til time

28-02-2023 10:00

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