Nutrition Biology (Seminar Course in MHS / Videregående Medicinalbiologi)

Title	Nutrition Biology (Seminar Course in MHS / Videregående Medicinalbiologi)			
Semester	E2022			
Master programme in	Medicinal biologi / Chemical Biology / 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

Registration

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

Ole Vang (ov@ruc.dk)

Head of study

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

Teachers

Study administration

INM Studieadministration (inm-studieadministration@ruc.dk)

Exam code(s)

U60206

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 will introduce to nutrition and nutritional components and their relevance to human health and diseases.

The knowledge will be given by intrductory lectures, student presentations, and discussions in the selected themes.

As part of the course each student have to make a meta-analysis in the nutritional biology area.

The themes covered by Nutritional Biology are

- The content and function of macromolecules in human diet, effect of bioactive compounds and their interactions, including vitamins and minerals
- Dietary effects on life-style diseases (cancer, diabetes, coronary-hearth disase)
- Epidemiologcal studies and metaanalysis

Course material and Reading list

Primary litterature are reviews and original articles posted at moodle.ruc.dk.

Background litterature:

- "Essentials of Human Nutrition" Jim Mann and Stewart Truswell (Ed) 5ed, Oxford University Press 2017.
- "Modern nutrition in health and disease" shills, shike, ross, caballero and cousins 11ed, lippincott williams & wilkins 2014.

Overall plan and expected work effort

The course contain

- Lectures: 16 hours
- Student presentations: 8 hours
- Meta analysis: 40 hours
- Preparation: 71 hours
- In total 135 hours

The lectures are given by internal and external lectures. The student presentations are based on the problem that are formulated by the student as part of their meta-analysis.

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

The sepcific course schedule will be posted at moodle.ruc.dk.

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

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

Active and satisfactory participation is defined as participation in the lectures and the student presentations and discussion of the theme described in these sessions.

Regular attendance is defined as 80 percent of the lectures and student presentations.

The students have to make 1-2 oral presentations containing scientific hypotheses, results and interpretations the area of nutritional biology to fellow students

The student presentations have to discuss the different physiological and regulatory responses in humans in relation to changes in the dietry intake

The student have to identify primary articles concerning a given problem and gather data from these articles, and critically evaluate and compile a meta-analysis. The meta-analysis will show a possible physiological effect of an intervention in relation to diet and/or lifestyle.

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

Exam code(s)

Exam code(s): U60206

Course days:

Hold: 1

Nutrition Biology (MHS)

time 05-09-2022 14:15 til

05-09-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 12-09-2022 14:15 til

12-09-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 19-09-2022 14:15 til

19-09-2022 16:00

location 07.1-033 - undervisningslokale (30)

Nutrition Biology (MHS)

time 26-09-2022 14:15 til

26-09-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Anja Elaine Sørensen (elaine@ruc.dk)

Nutrition Biology (MHS) - please note 07.2

time 03-10-2022 14:15 til

03-10-2022 16:00

location 07.2-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS) - please note 07.2

time 10-10-2022 14:15 til

10-10-2022 16:00

location 07.2-033 - undervisningslokale (30)

Nutrition Biology (MHS)

time 17-10-2022 14:15 til

17-10-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 24-10-2022 14:15 til

24-10-2022 16:00

location 07.1-033 - undervisningslokale (30)

Nutrition Biology (MHS)

time 31-10-2022 14:15 til

31-10-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 07-11-2022 14:15 til

07-11-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Anja Elaine Sørensen (elaine@ruc.dk)

Nutrition Biology (MHS)

time 14-11-2022 14:15 til

14-11-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 21-11-2022 14:15 til

21-11-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 28-11-2022 14:15 til

28-11-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 05-12-2022 14:15 til

05-12-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 12-12-2022 14:15 til

12-12-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology (MHS)

time 19-12-2022 14:15 til

19-12-2022 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Ole Vang (ov@ruc.dk)

Nutrition Biology - Hand-in of report (MHS)

time 23-12-2022 10:00 til

23-12-2022 10:00

forberedelsesnorm ikke valgt forberedelsesnorm D-VIP ikke valgt

Nutrition Biology - Take-home assignment (reexam) (MHS)

time 10-02-2023 10:00 til

17-02-2023 10:00

forberedelsesnorm ikke valgt forberedelsesnorm D-VIP ikke valgt