SYLLABUS

Stress Physiology 15 credits H0012H

Stressfysiologi

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE 2020-06-18



Admitted in Autumn 2023, Sp 1 **Date** 2020-06-18

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Stress Physiology 15 credits H0012H

Stressfysiologi

First cycle, H0012H

Education level First cycle Grade scale U G VG * Subject Medicinsk vetenskap Subject group (SCB) Medicine

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and Basic knowledge in health promotion, health guidance, physiotherapy, nursing and occupational therapy consisting of 52.5 credits or the equivalent knowledge. Basic knowledge in anatomy and physiology 7.5 credits in endocrinology and the autonomous nervous system or the equivalent knowledge.

Selection

The selection is based on 1-165 credits.

Course Aim

The student should, on completion of the course, from a health promotion perspective, be able to:

- 1. Describe control of the body through the CNS, autonomous nervous system, in relation to the senses and stress
- 2. Describe the interplay between the senses, the limbic system and hypothalamus and describe how stress/anti-stress influence the functions of the different structures
- 3. Describe how stress influences the human body's normal physiological functions from cell level to different organ systems
- 4. Explain how stress can lead to pathological changes in the human body
- 5. Describe how the anti-stress system of the body functions.
- 6. Describe factors that can decrease stress load and promote health, for the individual, the organisation and the society.

Contents

- Strain, recovery and control of the central nervous system
- · Strain, recovery and control of the autonomous nervous system
- The senses in relation to strain and recovery
- Strain and influence of recovery on the endocrine system.
- General Stress physiology
- The stress perspective
- Stress from a molecular and cellular perspective
- Stress and stress management at the individual level from a health promotion perspective
- Stress and stress management on community and organisational level from a health promotion perspective



Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The studies are carried out half-time as an IT distance course without physical meetings. The backbone of the course consists of an interactive web-based course shell. This will promote mutual interaction between the course participants and also between teachers and students. Computer experience and access to an Internet connection are required equivalent to at least ADSL, with a headset and web camera. The studies in the course are carried out partly by means of recorded lectures. Furthermore, seminars are conducted in real time where the various assignments are discussed. Practical exercises and work in groups are also included in the course. The studies are based on active individual work that includes literature studies, individual assignments and several group assignments. Each subsection will lead up to a discussion, where factual knowledge is consolidated to a deeper understanding in the student seminar and teacher-supervised seminar. Lectures, study assignments and seminar assignments are compulsory. In the case of absence, an alternative assignment is given. This course is an optional module in the health guidance programme. This course, exactly like the program, is based on a pedagogic strategy where meetings and exchanges between people are the focus. Active participation in class is therefore necessary. Group work also aims to develop skills that only can be trained through interaction and experience sharing with others. The course assignments will also aim at a holistic approach to human health connected to physical, mental, emotional, social and existential well-being.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. The course objectives are examined according to the following: Objectives 1-4 written assignments individually and in groups. Grading criteria for pass and pass with distinction are described in the study guide

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

This is a first-cycle course. Study supervision is provided in the course room in Canvas

Course offered by

Department of Health, Education and Technology

Modules

| Code | Description | Grade scale | Cr | Status | From period | Title |
|------|----------------------------------|-------------|----|-----------|----------------|-------|
| 0001 | Assignment report Controlling | U G VG * | 5 | Mandatory | A14 | |
| 0002 | Assignment report Interaction | U G VG * | 5 | Mandatory | A14 | |
| 0003 | Assignment report Revitalization | U G VG * | 5 | Mandatory | A14 | |



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Last revised

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Syllabus established

by Prefekt vid Inst för hälsovetenskap 2014-02-12

