Course syllabus for

Advanced Clinical Physiological Diagnostics, 7.5 credits

Avancerad klinisk fysiologisk diagnostik, 7.5 hp
This course syllabus is valid from spring 2020.
Please note that the course syllabus is available in the following versions:
Spring2017 , Spring2018 , Spring2019 , Spring2020

Course code	1BA137
Course name	Advanced Clinical Physiological Diagnostics
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Biomedical Laboratory Science
Level	G2 - First cycle 2
Grading scale	Pass, Fail
Department	Department of Laboratory Medicine
Decided by	Utbildningsnämnden LABMED
Decision date	2016-11-07
Revised by	Education committee LABMED
Last revision	2019-10-18
Course syllabus valid from	Spring 2020

Specific entry requirements

A pass grade in the courses in-depth clinical physiological diagnostics, nuclear medicine diagnostics and neurophysiological diagnostics as part of the biomedical analyst program focusing on clinical physiology or equivalent courses.

A student who has failed a clinical training placement (VFU) due to the fact that the student has shown serious shortcomings in knowledge, skills or attitudes to patient safety or patient confidence in the healthcare, is authorized for a new VFU opportunity only when the individual action plan has been completed.

Objectives

The overall goal of the course is to deepen the student's methodological and diagnostic skills in a selective method within clinical physiological diagnostics. The course is mainly clinical training and attaches great importance to the scientific basis of the diagnostic measurements and quality assurance. The course will also provide an increased ability to collaborate both intra- and interprofessionally.

Knowledge and understanding
After passing the course, the student should be able to:

- Explain the current diagnostic measurements used and their scientific basis
- Describe and discuss how external and internal quality assurance work is conducted in the clinical setting and what this work means for the methods currently used.

Skills and abilities
After passing the course, the student should be able to:

- Prepare and /carry out diagnostic measurements in a specific clinical discipline
- Independently search, critically review and assess current research and development work within the clinical discipline
- Teach and inform different groups
- Show the ability for intra- and interprofessional collaboration in a clinical setting.

Evaluation ability and approach
After passing the course, the student should be able to:

- Demonstrate a professional approach towards patients, their relatives and other healthcare professionals
- Reflect on the relationship between science and proven experience and the significance of the association for clinical training in the specific discipline
- Reflect on the value of intra- and interprofessional collaboration
- Identify the need for additional knowledge and further development of clinical compentency

Content

The course is mainly taught through clinical training (VFU) in a relevant clinical discipline. The student selects one of the following disciplines: echocardiographic diagnostics, cardiovascular diagnostics, arrhythmia diagnosis, sleep apnea diagnosis, cardiac MRI diagnostics, invasive cardiovascular diagnostics, nuclear medicine diagnostics, neurophysiological diagnostics, child physiological diagnostics, exercise physiology or pulmonary physiological diagnostics. The student will deepen his/her practical and theoretical knowledge and relate this to scientific research within the chosen field of study. Depending on the discipline chosen by the student, it becomes either an in-depth study of a clinical measurement already known to the student or a broadening of a completely new clinical measurement for the student. This is also the reason why in some methods the student is expected to conduct independent clinical measurements (eg ultrasound heart) while for other methods the student is not expected to carry out clinical measurements independently (eg cardiac MRI). Please note that occasionally a selected discipline might not be available due to lack of places for clinical training.
An important part of the course consists of the oral presentation of the chosen discipline that the student gives at the end of the course. The student will write a report that deals with the current methodology and its scientific foundation, including quality assurance. The student will also reflect on the interaction between patients and their relatives and the different staff in the health care sector.

Teaching methods

The course is mainly encompasses clinical training and report writing, including literature studies and seminars. During the clinical training placement, the student has a supervisor but the student is largely responsible to search and compile information for his/her oral presentation and written report. During the clinical training the student is to keep a logbook where clinical measurement results are collected, processed, analyzed and reported.

The course director assesses if, and in that case how, absence can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the course director's instructions, the student's results for respective part will not be registered. Absence from a compulsory activity may result in that the student cannot compensate the absence until the next time the course is given.

Examination

The course is examined through an oral presentation (grades U / G) and a written report (grades U / G) in the specific clinical discipline. The clinical training is examined by the clinical supervisor and/or the clinical liason educator (AKA) provides evidence for assessment according to the established assessment form for clinical training (grades U / G). In addition, the student's progression and individual performance are assessed based on the logbook (grades U / G). To obtain grade G for the whole course, grade G is required in all examinations.

The opportunity for reexamination is given as instructed by the course coordinator.
In the case of failed clinical training, the student has the opportunity to do this one more time.

The examiner can with immediate effect interrupt a student's clinical training (VFU) or equivalent if the student shows such serious shortcomings in knowledge, skills or attitudes so that patient safety or patient confidence in health care is at risk. When the VFU is interrupted in this way, it means that the student has failing the clinical training and that a VFU opportunity is consumed.
In such cases, an individual action plan shall be drawn up indicating what activities and knowledge controls are required before the student is given the opportunity for a new clinical training placement (VFU) on this course.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section/s of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

Literature and other teaching aids

Klinisk fysiologi : med nuklearmedicin och klinisk neurofysiologi
Jonson, Björn; Wollmer, Per

3., [rev.] uppl. : Stockholm : Liber, 2011 - 397 s.
ISBN:9789147099313 LIBRIS-ID:12189858
Library search