First-cycle level



### **COURSE SYLLABUS**

# Prosthetics and Orthotics, Intermediate Course, 30 credits

Prosthetics and Orthotics, Intermediate Course, 30 högskolepoäng

Course Code: HOFN11 Education Cycle:

Confirmed by: Chairperson of the Educational Council Disciplinary Medicine Jan 24, 2011 Disciplinary domain:

Revised by:Utbildningsrådet Nov 14, 2016Subject group:MT2Valid From:Jan 23, 2017Specialised in:G2F

Version: 3 Main field of study: Prosthetics and Orthotics

Reg number: 2016/4565 (313) Department of

### **Intended Learning Outcomes (ILO)**

Rehabilitation

Upon completion of the course the student should have the ability to;

### Knowledge and understanding

- be familiar with evidence and research within the studied subjects
- be familiar with different treatment options
- be familiar with common manufacturing methods in prosthetics and orthotics.

#### Skills and abilities

- · perform analyses of needed interventions with regards to the needs of the individual user
- apply orthotic and prosthetic interventions based on process thinking
- discuss and document performed actions and results according to existing legislation in the field
- be familiar with frequently used materials and equipment which are necessary in the production of orthotic and/or prosthetic devices, all according to regulations of occupational safety and health
- perform manufacture of orthotic and prosthetic devices
- critically evaluate and relate to the relevance of current science and empirical evidence in prosthetics and orthotics.

## Judgement and approach

- demonstrate empathy towards users and colleagues
- critically evaluate own performance in the course.

#### Contents

#### Part 1, 6 credits

- foot orthoses (insoles)
- orthopaedic shoes
- the rehabilitation process for patients, from needs analysis to finished product
- current research and evidence within the subject area
- relevant laws and agreements when working with patients

- occupational health and safety
- work hygiene

### Part 2, 6 credits

- ankle-foot-orthoses (AFO)
- current research and evidence within the subject area

### Part 3, 7.5 credits

- prostheses for trans-tibial amputations
- partial foot- and Symes prosthesis
- current research and evidence within the subject area

### Part 4, 3 credits

- upper extremity prosthetics
- upper extremity orthotics
- current research and evidence within the subject area

### Part 5, 7.5 credits

- prostheses for trans-femoral amputations
- current research and evidence within the subject area

### Type of instruction

This course is presented in the form of lectures, group work, seminars and laboratory sessions of which some includes meeting patients.

The teaching is conducted in English.

#### **Prerequisites**

Entry into this course requires completion of all courses included in the first year of study within the prosthetics and orthotics program. In addition, students must have participated in the courses 'Applied mechanics and material sciences', 15 Credits and 'Biomechanics', 15 Credits or equivalent..

### **Examination and grades**

The course is graded A, B, C, D, E, FX or F.

Examination in part 1 and 5 is done by individual written assignments and group seminars. In part 2 and 3, examination is based on group seminars and a written accounts.

In part 4, examination is based on one written exam. Performance with patients is monitored throughout all parts and is part of the examination.

Examination of the whole course is carried out by weighting the part course results against each other.

A university lecturer serves as the course examiner.

#### Registration of examination:

Name of the Test	Value	Grading
Part 1, written assignment	6 credits	A/B/C/D/E/FX/F
Part 1, seminar	0 credits	U/G
Part 2	6 credits	A/B/C/D/E/FX/F
Part 3	7.5 credits	A/B/C/D/E/FX/F
Part 4	3 credits	A/B/C/D/E/FX/F
Part 5, written assignment	7.5 credits	A/B/C/D/E/FX/F
Part 5, seminar	0 credits	U/G

### Other information

### Attendance requirements

During the course attendance is compulsory to laboratory sessions and seminars.

#### Temporary interruption of a course

The School of Health Sciences may suspend a student's participation in clinical training or other practical activities during the course if a student demonstrates gross unfitness/incompetence when he/she applies his skills. A student whose work-based training or other practical activities have been canceled due to gross inadequacy/incompetence may not attend the course again before the course director or examiner has verified and approved that the student has the knowledge and skills needed. In connection with a decision on suspension, the decision should specify the grounds on which the suspension is based. After the decision an individual plan should be established for the student which must specify the knowledge and skills gaps that exist, which support the student can count on, how the control should be carried out, when the first control should take place and when any new controls may take place.

### Course literature

Lusardi, M., Jorge, M., & Nielsen, C. (2013). Orthotics and Prosthetics in Rehabilitation. St.Louis: Saunders Elsevier.

McRae, R. (2010). Clinical Orthopaedic Examination. Edinburgh: Churchill Livingstone.

Smith, D.G., Michaels, J.W., Bowker, J.H. (Ed.). (2004). *Atlas of Amputations and Limb Deficiencies: Surgical, Prosthetic and Rehabilitation Principles*. Rosemont, Illinois: American Academy of Orthopaedic Surgeons.

The most recent editions of the course literature should be used.

Additional relevant journal articles will be used.