# nholland university of applied sciences

# Ultrasound

## Course guide 2024-2025

Semester Inholland location(s) Inholland faculty Language of instruction Cycle Number of ECTS Spring (semester 2, term 3) Haarlem Health, Sports & Social Work English Bachelor level 20

## **Content subjects**

- Basic scanning skills
- Ultrasound examination upper abdomen
- Duplex carotid arteries
- Topographic anatomy
- Image recognition
- Sonographic appearance common pathology
- Ultrasound physics

#### Learning outcomes

- Have understanding of the normal anatomy and physiology of the organs and vascular system in the upper abdomen
- Develop scanning skills in order to evaluate organs and vascular system in the upper abdomen by ultrasound and produce images of these
- Be able to perform a basic ultrasound examination in a given case
- Recognize abnormal appearance of the organs and vascular system in the upper abdomen
- Have understanding of pathologic processes and their ultrasound appearances
- Apply knowledge of ultrasound physics in practical examination
- Further develop communicative and co-operative skills
- Have insight into the role of the ultrasound technician in relation to general medical imaging

#### Mode of delivery, planned activities and teaching methods

- Problem based learning (PBL) which requires participation in:
  - o Group meetings with problem tasks
  - o Lectures
  - o Role-play exercises and demonstrations
  - o Individual study
  - Project and report writing in English
  - Oral presentations of the report in English
- Skills lab training: practical training on ultrasound equipment in the skills lab
- Clinical outplacement (1 week max.):
  - Attending ultrasound examinations
  - Performing basic examinations in radiology

#### Prerequisites and co-requisites

Course is only available for radiology students and radiation therapy students from institutes which are member of the Erasmus Radiography Group (ERG). Application only through ERG coordinator of home university.

#### Recommended or required reading and/or other learning recourses/tools

Books / reader available at host institution.

#### Assessment methods and criteria

- Attending to mandatory classes
- All assignments are handed in
- Presentations
- Clinical placement
- Practical and theoretical (anatomy, fysics, pathology) exams
- Portfolio assessment

All items will be assessed and have to be passed.

## Lecturer(s)

Coordinator Ultrasound: Geert Plug (Geert.Plug@inholland.nl)