UNIVERSITY OF SKÖVDE

COURSE SYLLABUS

Human-Robot Interaction, Third-cycle level

5 credits

Course code: IT0948F
Version number: 1.0
Valid from: 2022-07-01
Ratified by: Education Commitee for Third-cycle Studies in Informatics
Date of approval: 2022-04-25

1. General about the course

The course is provided by the University of Skövde and is named Human-Robot Interaction (Människa-robotinteraktion). It comprises 5 credits. The course is at third cycle.

The course is a part of the third-cycle subject area of Informatics.

2. Entry requirements

At least 60 credits within the main field of Informatics, Engineering Science, Computer Science or Cognitive Science (or the equivalent) including an independent project/degree project of at least 15 credits at second-cycle level (or the equivalent).

A further requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as the Swedish course English 6. This is normally demonstrated by means of an internationally recognized test, e.g. IELTS or TOEFL.

3. Course content

The course aims to deepen the students' knowledge within the interdisciplinary field of HRI. Initially, the course introduces the emergence and roots of HRI, its interdisciplinary nature and its various applications.

The course also focuses on the scope and character of current HRI research, addressing the state of the art in HRI, as well as a foreseeable directions toward which the field is developing. It pays in-depth attention to the robot perspective, the human perspective and the interaction perspective of HRI.

The course also addresses the challenges of being an interdisciplinary research field as well as ethical and societal issues that may arise in research and development of HRI.

4. Objectives

After completed course the student should be able to:

- extensively describe, analyze and problematize the origin and the state of art of the interdisciplinary field of human-robot interaction (HRI) including human-robot collaboration;
- extensively exemplify and contrast different perspectives on central foundations, principles, methods and theories within HRI;
- extensively describe, exemplify, and discuss the human perspective, the robot perspective and the interaction perspective of HRI; and
- analyze and argue ethical and societal issues that may arise in relation to HRI research.

5. Examination

The course is graded Pass (G) or Fail (U).

To receive the grade Pass on the course, all examination parts have to be graded Pass.

The course has the following examination parts:

- **Seminar Assignment**
  2.5 credits, grades: G/U
- **Assignment**
  2.5 credits, grades: G/U

Doctoral students with a permanent disability who have been approved for directed educational support may be offered adapted or alternative examinations.

6. Forms of teaching and language of tuition

The teaching comprises seminars/group discussions, project work, lectures and supervision.

The teaching is conducted in English.

7. Course literature and other educational materials

Bartneck, C., et. al. (2020). *Human-robot interaction: An introduction*. Cambridge, UK: Cambridge University Press. ISBN 9781108735407.

Scientific articles designated on the course website.

8. Doctoral student influence

Doctoral student influence in the course is ensured by course evaluation. The students are informed about the result of the evaluation and potential measures that have been made or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the University's website.