



## DEPARTMENT OF APPLIED INFORMATION TECHNOLOGY

### **TIA161 Digital Innovation in Sports, 7.5 credits**

Digital innovation i sport, 7,5 högskolepoäng

*Second Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Applied Information Technology on 2021-10-12 and was last revised on 2024-02-06 to be valid from 2024-02-06, spring semester of 2024.

*Field of education:* Science 100%

*Department:* Department of Applied Information Technology

#### **Position in the educational system**

The course is given as a freestanding course. It is also an optional course in the programme specified below.

The course can be part of the following programme: 1) Human-centered Artificial Intelligence Master's Programme (T2HAI)

#### *Main field of studies*

Informatics

#### *Specialization*

A1N, Second cycle, has only first-cycle course/s as entry requirements

#### **Entry requirements**

Bachelor's degree (180 credits). Applicants must prove their knowledge of English: English 6/English B from Swedish Upper Secondary School or the equivalent level of an internationally recognized test, for example TOEFL, IELTS.

#### **Learning outcomes**

On successful completion of the course the student will be able to:

*Knowledge and understanding*

1. discuss digitalisation in sports, based on central concepts in the field;
2. outline how digital technology effects traditional sports and athletics;

#### *Competence and skills*

3. systematically investigate digital innovation in specific sports;

#### *Judgement and approach*

4. reflect on how different sports have met with technological developments and changes in how technology is used;
5. analyse how digitalisation in sports develop and challenge the existing conditions.

### **Course content**

The course consists of two parts:

#### *Sub-courses*

#### **1. Basic Theories and Concepts** (*Grundläggande teorier och begrepp*), 3 credits

Grading scale: Pass (G) and Fail (U)

In the first part of the course the student will get an overview of concepts that help explain digitalisation and concepts to describe sports and athletics. In this part we will also address questions about how digitalisation relates to equality, justice and sustainability. The students will be exposed to a number of overall concepts through lectures, literature studies and discussions. The examination is based on the student's ability to understand the meaning of the concepts.

#### **2. Analysis of technology use** (*Analys av teknikanvändning*), 4.5 credits

Grading scale: Pass (G) and Fail (U)

In the second part of the course, the student must perform an analysis of a specific sport with a focus on digitalisation. This part will be carried out individually or as a group task. During the examination, the student(s) must be able to describe the use of technology in a specific sport, reason about how the use has developed over time and reflect on possible future consequences. The analysis must be based on the concepts introduced in the first part of the course.

### **Form of teaching**

The course is given as a distance course with lectures, seminars, and online tutoring. The course structure is flexible and students can choose to participate in the course synchronously or to complete it completely asynchronously.

In the course, the students will, in part 2 "Analysis of technology use", have significant freedom to investigate specific technology use within the framework of their

own sports or sports activity.

A few non-obligatory activities in the form of literature seminars and practical exercises around the use of technology will be offered as campus-based activities.

*Language of instruction:* Swedish and English

Teaching will mainly take place in English, but students will be offered literature seminars, tutorials and examinations also in Swedish.

### **Assessment**

The first part of the course is examined through a digital exam that is connected to learning outcomes 1 and 5.

The second part of the course is examined through a written assignment as well as an oral presentation. This part of the examination is connected to the learning outcomes 2, 3 and 4.

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed. The same applies to placements and professional placements (VFU), although this is restricted to just one additional examination session.

### **Grades**

The grading scale comprises: Pass (G) and Fail (U).

In order to receive a pass grade for the whole course, the student must get a pass grade for each part of the examination.

### **Course evaluation**

An anonymous course evaluation will be carried out at the end of the course. The results of the evaluation and possible changes to the course will be shared with students who

participated in the evaluation and students who are starting the course.