COURSE SYLLABUS

Android Development, 7.5 credits

Android och gränssnittsdesign, 7,5 högskolepoäng

Course Code:	TAGK19	**Education Cycle:**	First-cycle level
Confirmed by:	Dean Dec 1, 2018	**Disciplinary domain:**	Technology
Valid From:	Jan 1, 2019	**Subject group:**	DT1
Version:	1	**Specialised in:**	G1F
		Main field of study:	Computer Engineering

Intended Learning Outcomes (ILO)

On completion of the course the student should:

Knowledge and understanding
- display an understanding for the consequences of the Android technical and economical ecosystems
- display an understanding for human interface guidelines for mobile devices

Skills and abilities
- display an ability to use the Android SDK and toochain to develop high quality Android apps
- display an ability to use sensor systems using Android APIs
- display an ability to use common APIs for Android
- display an ability to employ established methods to develop user interfaces for small screens with touch input

Judgement and approach
- display an ability to evaluate the Android system architecture

Contents

The purpose of the course is to give an introduction to and experience of Android programming, from start to finished and published app.

The course includes the following topics:
- Android architecture
- Java
- The Android SDK
- Handling different runtime configurations
- GUI development for Android
- Sensors (gyroscope, GPS, camera)
- Network communication in Android
- Other key APIs

- Publishing on the Google Play Store

Type of instruction

Tuition will consist of lectures, lab work and project work.

The teaching is conducted in English.

Prerequisites

General entry requirements and completed courses in Object-Oriented Software Development, 6 credits or Object-Oriented Software Design, 7,5 credits and Linear Algebra 6 credits (or the equivalent).

Examination and grades

The course is graded 5,4,3 or Fail.

The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

Name of the Test	Value	Grading
Project Work[I]	6 credits	5/4/3/U
Laboratory Work	1.5 credits	U/G

[I] Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

Literature

The litterature list for the course will be provided one month before the course starts.

Title: The Busy Coder's Guide to Android Development
Author: Mark L. Murphy
Publisher: CommonsWare, LLC
ISBN: 978-0-9816780-0-9