COURSE SYLLABUS
iOS Development, 7.5 credits

iOS-utveckling, 7,5 högskolepoäng

Course Code:	TISK18	**Education Cycle:**	First-cycle level
Confirmed by:	Dean Apr 6, 2018	**Disciplinary domain:**	Technology
Valid From:	Aug 1, 2018	**Subject group:**	DT1
Version:	1	**Specialised in:**	G1F
		Main field of study:	Computer Engineering

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding
- display an understanding for how iOS software is packaged and distributed to users

Skills and abilities
- display an ability to program using the Swift language and the XCode development environment
- display an ability to apply established design patterns for iOS development
- display an ability to use GPS and other sensor systems through iOS APIs
- display an ability to use iOS APIs to synchronise documents and data between mobile devices
- display an ability to design and implement user interfaces for different types of iOS-based devices

Judgement and approach
- display an ability to evaluate iOS applications' design and implementation, taking into consideration both technical and usability factors

Contents

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

The course includes the following topics:
- XCode and Swift
- Memory management
- Design patterns in the iOS APIs
- GUI development with iOS
- Software quality
- Testing and debugging
- Sensor usage

- Network communication in iOS
- Other key APIs
- Publishing on the App 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 Objectoriented Software Design, 7,5 credits, Linear Algebra 6, credits and Web Development Fundamentals, 7,5 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[1]	5 credits	5/4/3/U
Laboratory Work	2.5 credits	U/G

[1] 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: iOS 11 Programming Fundamentals with Swift
Author: Matt Neuburg
Publisher: O'Reilly Media, Inc
ISBN: 9781491999318