

Faculty of Health, Science and Technology Construction Engineering

# Syllabus

# **Construction Management 2**

Course Code:	BYGC16
Course Title:	Construction Management 2 Construction Management 2
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

**Major Field of Study:** BYA (Building Technology)

# **Course Approval**

The syllabus was approved by the Faculty of Health, Science and Technology 2015-02-25, and is valid from the Spring semester 2015 at Karlstad University.

#### **Prerequisites**

At least 90 ECTS cr completed for TGHBY programme courses, including Construction Management I BYGB23, 7.5 ECTS cr and Computer Aided Construction Design in a BIM process BYGB22, 20 ECTS cr, or equivalent.

#### **Learning Outcomes**

The aim of the course is that students acquire knowledge of the basic concepts used in legislation, rules and circumstances that regulate a construction project such as contract law, tender agreement and labour law etc. Students should also acquire basic knowledge of and skills in planning, organising and completing a construction project efficiently with consideration of quality and work environment issues.

Upon completion of the course, students should be able to:

- give an account of the rules and regulations pertaining to the various stages of the construction process,

- draw up a standard agreement for consultant and contract procurement,

- analyse and suggest solutions to disputes related to standard agreements for consultant and contract procurement,

- describe the basics of quality and environmental assurance and the tools, standards and methods used for this,

- apply tools, standards and methods for quality and environmental assurance in minor projects,
- identify risks, assess probability for various risks and their impact on efficient production,
- assess different construction logistic solutions from a production and environment perspective,

- write a clear, comprehensible and well structured report and give an oral presentation with appropriate aids.

#### Content

Instruction is in the form of lectures, exercises, seminars, field trips and supervision in connection with exercises, group work and projects.

The course comprises the following components:

- Contract law, standard agreement, branch regulations, legislation pertaining to the construction process

- Tender invitation, requirements from the perspective of the constructor, procurement and forms of procurement, procurement of sub-contractors and consultants, LOU

- Production planning, production effectivisation, LEAN, six sigma, construction logistics, supplier cooperation, risk analysis

- quality and environmental assurance, risk assessment in terms of work environment, quality plans, environmental plans, ISO standard.

### **Reading List**

See separate document.

### Examination

Assessment is based on a written exam and a project.

### Grades

One of the grades Fail (U), Pass (3), Pass with Some Distinction (4), or Pass with Distinction (5) is awarded in the examination of the course.

### **Quality Assurance**

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

#### **Course Certificate**

A course certificate will be provided upon request.

# **Additional information**

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.