Linnæus University

Jnr: 2014/3637-3.1.2

Course syllabus

Faculty of Technology

Department of Built Environment and Energy Technology

1BT050 Hållbar innovation i byggsektorn, 7,5 högskolepoäng
Sustainable innovation in the building sector, 7.5 credits

Main field of study
Civil Engineering, Environmental Engineering, Technology

Subject Group
Building Technology

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved by Faculty of Technology 2014-10-28
The course syllabus is valid from spring semester 2015

Prerequisites
NO VALUE DEFINED

Objectives

On completion of the course the students should be able to:

- Understand and describe factors influencing diffusion of innovations in the building industry,
- Understand and describe factors influencing diffusion of energy efficiency measures in households,
- Discuss strategies to promote diffusion of innovations in the building sector.

Content

The course deals with factors influencing diffusion of innovations and how they can be promoted in the built environment. A rough division is made between factors which influence the adoption of innovations in (a) the construction industry and (b) among households. Specific aspects include:

- Energy use, especially in buildings, in Sweden and Europe,
- Overview of innovation system, path dependency and technology transition processes,
- The characteristics and innovativeness of the construction industry,
- Theories of individual behaviour,
- Adopter categories, attributes of innovation, and rate of adoption,
- The role of change agents and information channels,
- Intervention strategies – incentives, information.

Type of Instruction

The teaching consists of lectures, seminars, assignments, and project work. Some parts are compulsory for students which will be notified when the course starts.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Evaluation of the student's performance is carried out in the form of an individual written examination, classroom presentations and a written group assignment. Students who do not pass the regular examination will have the opportunity to submit, a supplementary written assignment within one month of the result announcement.

On request, students may have their credits translated to ECTS marks. Such a request must be sent to the examiner before the grading process starts.

Course Evaluation

A course evaluation will be carried out and compiled after the course is completed. The compilation will be presented to the current board as well as to the students and filed.

Other

The course is offered in English.

Required Reading and Additional Study Material

Required reading

1. Rogers, E.M., 2003. Diffusion of Innovations, 5th edition, Free Press, New York. 512p.(for a good summary see: http://en.wikipedia.org/wiki/Diffusion_of_innovations)
2. Fagerberg, J, Mowery, D.C. and Nelson, R.R. (eds.), 2004. The Oxford Handbook of Innovation, Oxford University Press, pp. 1-27 and pp. 181-208.
3. Steg, L. Van Den Berg, A.E., and De Groot, J.I.M., 2013. Environmental Psychology, British Psychological Society and John Wiley & Sons, Ltd, Ch. 18, 21, 22, 23.
4. Geels, F.W., 2002. Technological transitions as evolutionary reconfiguration process: a multi-level perspective and a case study, Research Policy, 31, 1257-1274.

The literature list is supplemented with recent articles and other relevant material.