



# AG2147 Sustainable Urbanism and Green Metropolitan City Re- gions 7,5 hp

Sustainable Urbanism and Green Metropolitan City Regions

När kurs inte längre ges har student möjlighet att examineras under ytterligare två läsår.

## Fastställande

Kursplan för AG2147 gäller från och med VT10

## Betygsskala

A, B, C, D, E, FX, F

## Utbildningsnivå

Avancerad nivå

## Huvudområden

Samhällsbyggnad

## Särskild behörighet

AG2143 Sustainable Urban & Rural Development

AG2501 Human Settlements & Housing

AG2141 Urban Infrastructure

or other relevant background (permission of instructor)

# Undervisningspråk

Undervisningspråk anges i kurstillfällesinformationen i kurs- och programkatalogen.

## Lärandemål

After completing the course requirements students should be able to:

- Demonstrate a general understanding of the complexities and crucial issues of urban development, green urbanism, city planning and management within the micro, meso and macro regions.
- Describe and tackle the negative aspects of climate change through rampant urban development, sprawl, energy waste, pollution, uncontrolled urbanization and migration and lack of sustainable planning & design.
- Critically analyze the synergy of transportation, economics, ecology, physical form and social aspects. Apply the theories of the regional city and sustainable urbanism to various regions, cities, neighborhoods and communities via new urban design proposals, master and spatial plans, infrastructure plans, new regional and planning tools, as well as through a plethora of different strategies and policy decisions. Gain a full understanding and hands-on knowledge of an operational regional and urban model, **The Transect** - a sustainable urbanism tool used for planning, design and classification of the elements of the human environment from rural to urban scales.

## Kursinnehåll

The focus of the course is on the synergy of transportation, economics, ecology, socio-cultural aspects and physical-urban form that are crucial for creating livable cities-communities of place that will together with their hinterlands produce sustainable metropolitan-regional cities. This can be achieved only through prism of a 'new sustainable (green) thinking and holistic regional design' where comprehensive physical planning and sustainable urbanism are crucial. Specific emphasis is given on regionalism, social and cultural aspects, physical proximity and neighborhood cohesion, connection with the hinterlands and green approaches as well as positive aspects of network society. Course also looks into the issues of affordable housing, public transportation, land use and zoning, economics, social and environmental justice and environmentally friendly neighborhoods and buildings. The students will examine how the principles of regional city and sustainable urbanism can be applied to a very concrete urban planning task in the greater region (area) of Stockholm. The project task will concern physical, social, ecological and economic development strategies for sustainable micro and macro regional structures. More specifically it will deal with issues such as: increasing sustainability through housing density, planning for public places and urban spaces; integration of transportation, land use and technology; built up of transportation and green corridors with integrated public transport; biophilia, smart growth and new urbanism.

## Kurslitteratur

Recommended Readings:

**Calthorpe, P. and Fulton, W.** (2001), **The Regional City**. Island press: Washington DC.;

**Farr, D.** (2007), **Sustainable Urbanism: Urban Design with Nature.** John Wiley & Sons: New Jersey;

**Haas, T.** ed. (2008), **New Urbanism & Beyond: Designing Cities for the Future.** Rizzoli: New York.

**Droege, P.** (2008) **The Renewable City.** Wiley Academy: New York.

(Student compendium of all the important readings will be available at course start).

## Examination

- PRO1 - Individual Project Work, 5,0 hp, betygsskala: A, B, C, D, E, FX, F
- ÖVN2 - Seminars, Workshops, 2,5 hp, betygsskala: P, F

Examinator beslutar, baserat på rekommendation från KTH:s handläggare av stöd till studenter med funktionsnedsättning, om eventuell anpassad examination för studenter med dokumenterad, varaktig funktionsnedsättning.

Examinator får medge annan examinationsform vid omexamination av enstaka studenter.

Seminars and workshops, (ÖVN2; 2,5 hp) and Individual project work, (PRO1; 5 hp)

## Övriga krav för slutbetyg

A 75 percent attendance of lectures, workshops and seminars is required. There are four compulsory seminars and workshops (ÖVN2; 2,5 hp) and the individual project work, (PRO1; 5,0 hp).

## Etiskt förhållningssätt

- Vid grupparbete har alla i gruppen ansvar för gruppens arbete.
- Vid examination ska varje student ärligt redovisa hjälp som erhållits och källor som använts.
- Vid muntlig examination ska varje student kunna redogöra för hela uppgiften och hela lösningen.