

**CEMUS Course Information Spring 2015**



# SUSTAINABLE DESIGN

**Ecology, Culture & Human Built Worlds – 2015**



## Sustainable Design: Ecology, Culture and Human Built Worlds 7.5 hp

*How can an interdisciplinary approach to design unlock new creativity and beauty? How can different design solutions in nature serve as a model for new human made designs? And what are the limits of human ingenuity and creative design?* This course looks at design from an interdisciplinary and critical perspective, with a focus on different theories and models that turns present conventions of design on its head.

With inspiration from ecology and nature, in-depth discussion of how cultural conditions define human perceptions of the environment, and an exploration of the nature of design itself, the course tries to reach practical and theoretical conclusions on how creative design can contribute to a sustainable and better world. The course combines interactive workshops with inspiring guest lectures and design-project work.

### We look forward to meeting you this semester!

Lakin Anderson & Alejandro Marcos Valls  
Course Coordinators Sustainable Design

## CONTACT INFORMATION

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Feel free to contact us regarding any aspect of the course. Preferably contact us by email.

Course Email: [sdesign@csduppsala.uu.se](mailto:sdesign@csduppsala.uu.se)

Lakin Anderson: [lakin.anderson@csduppsala.uu.se](mailto:lakin.anderson@csduppsala.uu.se)

Alejandro Marcos Valls: [alejandro.marcos@csduppsala.uu.se](mailto:alejandro.marcos@csduppsala.uu.se)

Website: <http://cemusstudent.se/sustainabledesign/>

Information will be posted on the webpage so make sure to visit it regularly, preferably once a week to check that there are no changes in the schedule.

Visit us at CEMUS, Geocentrum, Villavägen 16, Uppsala  
Telephone: 018-471 27 95  
[www.cemusstudent.se](http://www.cemusstudent.se)

**Please note:** We do not have specified office hours, so please contact us by email or during class if you would like to meet in person.

## COURSE STRUCTURE

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A preliminary schedule is available on the course website at:

<http://cemusstudent.se/sustainabledesign/>

The course consists of engaging lectures, seminars and workshops, as well as examinations including individual and group work. During interactive seminars we will take a closer look at topics from lectures and the literature. During the workshops we will work through the design process and apply design methods to solve today's sustainability challenges. The classes will take place on Wednesday evenings with occasional variations. One weekend workshop will also be included (see the online schedule for specific times). It is mandatory to attend seminars and workshops. All lectures and seminars require that you are well prepared.

As the course progresses, you will be given several assignments to complete, including a larger sustainable design project which you will decide on. More information about these assignments and examination, as well as the seminar tasks and sessions, will be presented in class and posted on the course website as the course progresses.

## LEARNING OUTCOMES

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On completion of the Sustainable Design course, the student should be able to;

- account for different theoretical and applied design principles and models for sustainable design;
- account for and critically relate to sustainable design from an ethical, cultural and historical perspective;
- critically review different design solutions ecological, social and economic consequences, risks, possible uses and functions in the work for a sustainable development;
- account for different phases in the design process;
- independently apply a specific design theory on a specific challenge within the sustainability field.

## EXAMINATION

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The course is a pass/fail course of 7.5 ECTS in total. This means the highest grade you can obtain is a pass (which translates to C in the International system). Records will show that this is the highest grade possible for the course.

You will be given four assignments to complete in this course. Each is linked to the course goals and objectives, and is designed to give you experience and understanding in sustainable design.

### Active Participation

We expect you to be active and inquisitive during lectures and seminars, as discussions and questions are an established part of each class. In order to do this you need to come prepared beforehand by reading the literature, which is often selected by the guest lecturers themselves for discussion. The course requires 75% attendance in order to pass the course.

### Mini Design Challenges

You will be given quick design challenges by lecturers, guests and course co-ordinators (1-2 per week) during class time. This work will be submitted towards the end of the course. More information on content and submission will be given by coordinators in class or on the course portal.

### Seminars & Workshops

You will need to turn in the assignments and prepare for the seminars. There will be a total of 2 seminars, if for some reason you miss a seminar you will have to make up for this by handing in an extra task. The extra task will be equally demanding and is focused on your individual effort and contribution to the content discussed during the seminars included in the regular schedule.

### Assignments

In addition to the Mini Design Challenges and Seminars & Workshops, you will be given other examination tasks throughout the course:

- The Design Hunt
- Spaceship Earth'
- Analysis of Design
- Design Project for Sustainable Futures

More information about each of these assignments will be given as the course progresses, in class and on the course portal.

## Make-Up Tasks

If you do not attend compulsory meetings or complete compulsory in-class exercises, you will be given a make-up task instead. More information about these tasks will be given as the course progresses, in class and on the course portal.

## LITERATURE

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Literature for the course is the following:

### Course Reader

This is a collection of literature by various authors. It is comprised of selected articles from books, academic journals, design handbooks, and other sources. Most guest lecturers have also recommended articles to include in this collection.

### Design for the Real World: Human Ecology and Social Change – By Victor Papanek

Paperback, completely revised Second Edition, 394 pages, Published by Academy Chicago Publishers (first published 1972). Please note: If you can better access the first edition of the book this will be sufficient as well.

### Student-Selected Book for Project Work

This is a book selected by you, the student. We have a list of suggested books which will be made available on the course portal, but you may choose a book that is not on this list. It can be any length, format or type of book. Your choice must be approved by the course coordinators and remember you will have to explain why you chose this book when you come to your examination for the final project.

## COURSE MANAGEMENT

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### Course Coordinators:

**Lakin Anderson** is from Australia. He previously studied Media & Communications and Environmental Management, and has a master's degree in Sustainable Development from Uppsala University. Since 2010 Lakin has taken several courses at Cemus and in the fall of 2013 he started working as a course coordinator. He is also engaged in research on agriculture and systems modelling.

**Alejandro Marcos Valls** is from Spain. He has a bachelor's degree in Environmental Sciences and in Media & Communication from the University of Barcelona and a master's degree in Sustainable Development from Uppsala University and SLU. He has taken different courses from Cemus since 2012 and he started working as a course coordinator in the fall of 2014.

### **Course Work Group:**

The Work Group meet with coordinators throughout the course to advice, improve and give feedback on course design, structure, examination and quality.

**Tuula Eriksson** is the head of the department for Landscape Architecture at SLU in Uppsala. She is a teacher and a researcher in the field of organizational theory and development, and sustainable development.

**Isak Stoddard** is Educational coordinator and acting program director at CEMUS. He holds a Master's degree in Engineering Physics with a focus on systems technology and renewable energy. For his Master's thesis, Isak travelled to West Java in Indonesia to develop small scale biogas systems in cooperation with two local organizations.

**Daniel Mossberg** is Director of Studies at CEMUS. Daniel has studied Art History, Practical Philosophy, Environment- and Development Studies, and Cultural Anthropology.

**Heleen de Goey** has a bachelor's degree in Industrial Design and a master's degree in Sustainable Development from Uppsala University. She has been a course coordinator at Cemus since 2012, including the Sustainable Design course and Global Challenges & Sustainable Futures.

**Julia Senninger** is a former student of the Sustainable Design course 2014.

## **CEMUS**

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### **CEMUS Education**

The education at CEMUS focuses on a comprehensive understanding of the challenges of sustainable development. This demands innovative teaching methods and an interdisciplinary approach. Since its inception, CEMUS courses have been run by students with the continual support of work groups and educational staff, whose members include professors and researchers from Uppsala's two universities.

CEMUS' primary point of departure and approach is based on what has become known as "Education for Sustainable Development (ESD)". Through democratic, realistic and extensive work modes, this teaching method strives to motivate students to heighten their critical thinking skills, as well as encourage responsibility and engagement in the issues of sustainable development.

The courses at CEMUS also function as a complement to the universities' specialised and disciplinary education. CEMUS is constantly widening its scope to address the most current debates in our society, as well as requests from students. Around 600 students per year take part in one or more of the many different courses offered at CEMUS.

CONTACT: Daniel Mossberg // [daniel.mossberg@csduppsala.uu.se](mailto:daniel.mossberg@csduppsala.uu.se)

## About CEMUS

CEMUS has as its goal to advance and inspire education and knowledge within the field of environment and development studies, as well as other boundary-transcending issues connected to sustainable development. CEMUS began as an initiative by students in the early 90's and CEMUS courses are, in large part, still run by students today. Since January 2007, CEMUS joined the Uppsala Center for Sustainable Development (CSD Uppsala) in conjunction with Uppsala University and SLU, the Swedish University for Agricultural Sciences. The courses at CEMUS are built in collaboration between students, course coordinators, teachers, researchers, university administrators and societal actors.

CONTACT: Isak Stoddard // [isak.stoddard@csduppsala.uu.se](mailto:isak.stoddard@csduppsala.uu.se)

WEB: [www.cemus.uu.se](http://www.cemus.uu.se)

COURSE PORTAL: [www.cemusstudent.se](http://www.cemusstudent.se)

FACEBOOK: <http://www.facebook.com/cemuscsduppsala>

TWITTER: <http://twitter.com/CEMUSCSDUPPSALA>

NEWSLETTER: Sign up at [www.cemus.uu.se/cemusnewsletter.html](http://www.cemus.uu.se/cemusnewsletter.html)

## Courses and study counselling

This year CEMUS is offering the following courses:

### Spring Semester 2015

- Hållbar utveckling B, 30 hp
- Hållbar utveckling – värderingar, världsbilder och visioner, 15 hp

- Teknik, makt och mänsklighetens framtid, 7.5 hp
- Livsfilosofi och det moderna samhället, 7.5 hp
- Applied Sustainability Studies Course Package, 30 hp
- Actors and Strategies for Change – Towards Global Sustainabilities, 7.5 hp
- Sustainable Design – Ecology, Culture and Human Built Worlds, 7.5hp
- Climate Change Leadership – Power, Politics and Culture, 15 hp
- Sustainable Development - Project Management and Communication, 15 hp
- Master in Sustainable Development: Worldviews and Discourses – A Seminar Series, 5 hp
- Technology, Power and the Future of Humanity (distance), 7.5 hp

### Autumn Semester 2015

- Hållbar utveckling A, 30 hp
- Människan och naturen, 7.5 hp
- Global miljöhistoria, 7.5 hp
- Klimatet, energin och det moderna samhället, 7.5 hp
- Global Sustainability Science Course Package, 30 hp
- Global Challenges & Sustainable Futures, 7.5 hp
- Critical Perspectives on Sustainable Development in Sweden, 7.5 hp
- The Global Economy – Environment, Development and Globalization, 15 hp
- Sustainable Development - Project Management and Communication, 15 hp
- Master on Sustainable Development: Introduction to Interdisciplinary Science, 5 hp
- Master in Sustainable Development: Worldviews and Visions – A Seminar Series, 5 hp

CONTACT: Sebastian Welling, Study Councilor // [susdev@geo.uu.se](mailto:susdev@geo.uu.se)

### Collaboration & Partnership – CEMUS Forum

The scope of the CEMUS model is not limited to the classroom setting. CEMUS Forum organizes open lectures, conferences and festivals on education for sustainable development, film showings, discussions, workshops and a variety of other events. Much of this work is done in collaboration with students, in the envisioning, planning and delivery stages. These events are intended to attract not only current university staff and students, but also alumni, government officials, interested individuals and organizations. The aim of this work is to extend the educational core of the center by bridging the gaps between the theoretical and the practical, the young and the old



and the academic and non-academic worlds, as well as to create a meeting place for people interested in interdisciplinary education and sustainable solutions. At the beginning of every semester, CEMUS Forum and CEMUS Roots (our student organisation) host a **Project Café**. This is a great way to get involved with current projects at CEMUS and share new ideas and projects you would like to make happen.

CONTACT: Malin Anderson // [malin.andersson@csduppsala.uu.se](mailto:malin.andersson@csduppsala.uu.se)

### **Transdisciplinary Research – CEMUS Research School**

Cemus Research Forum (Cefo) is an interdisciplinary research school for PhD students that focus on broad environment and development-related issues. As a PhD student associated to Cefo you aim to participate actively in Cefo's research seminars (about 5 seminars per term) and propose activities according to your own research interest. The courses and the seminars are also open for those doctoral students that are not associated to CEFO.

CONTACT: Gloria Gallardo // [gloria.gallardo@csduppsala.uu.se](mailto:gloria.gallardo@csduppsala.uu.se)

### **CEMUS Roots**

CEMUS Roots is a dynamic and self-governing student-run group, inclusive to all. It was established in order to allow students to take an active role in influencing the way that education is conducted at the center. Active participants have in the past taken on the roles of CEMUS student representatives attending university faculty and CSD board meetings. Conferences, field trips, lectures, workshops, film showings and open-panel discussions are just some of the types of events which the group has realized in the past, both with and without the cooperation of staff. In CEMUS Roots students have the opportunity to realize their visions for a more sustainable culture, and fill in the gaps of their education in ways which are most beneficial to their learning.

[roots.cemusstudent.se](http://roots.cemusstudent.se)  
[www.facebook.com/CEMUSRoots](http://www.facebook.com/CEMUSRoots)

## PRACTICAL INFORMATION

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CEMUS is open between 9:00am and 15:30pm, Mondays to Fridays. If you want to study in the library outside these hours or during weekends, you can easily get a **key card**. The key card also gives access to the main Geocentrum entrance, which is locked after 17.00 and before 08.00. To get a key card, go to the building attendant's office, next door to the library in Geocentrum. (You must be registered for a CEMUS course to get the key card.)

### CEMUS Library // Lab // Lounge

In the CEMUS Library // Lab // Lounge you will find literature related to environment and development issues, magazines, journals and other publications, such as master and doctoral theses. You can also have a cup of coffee from library self-service "café", slouch in the sofas and read the course literature. **The library is a shared space for staff, coordinators and students – please respect the guidelines posted in the library to ensure a pleasant work and study environment for all.** It is possible to book the library for CEMUS-related activities, however, educational activities such as seminars have precedence. All the course literature for CEMUS courses is available there, including several shelves of reference books. These may **only be read inside the library**, and are not to be taken home. There are also books that can be borrowed through the Geocentrum Library.

### Geocentrum library

The Geocentrum Library is located down the hall from CEMUS. Copies of the CEMUS course literature are available for borrowing there. You can also go there to borrow books from the CEMUS library (only the ones that are marked with the Geo-library system).

### The Language Workshop (Språkverkstaden) at Uppsala University

The Language Workshop offers consultations about written and oral presentations on an individual basis in both Swedish and English. It is free of charge and available to all students on the undergraduate and master's levels. We strongly encourage you to get in touch with the Language Workshop if you are struggling with a paper or want to improve your written English.

[www.sprakverkstaden.uu.se](http://www.sprakverkstaden.uu.se)

Map with important locations:

