



CEMUS



SUSTAINABLE DESIGN

Ecology, Culture and Human Built Worlds - 2017



Course Information



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How can an interdisciplinary approach to design unlock new creativity and beauty? How can different design solutions in nature serve as a model for human made designs? What are the limits of human ingenuity and creative design? What is design itself? How can we get inside the design process to understand it and begin designing the future we want?

Welcome to Sustainable Design 2017 at CEMUS, Uppsala University. With this course we take a journey into design as a field, as a concept, and as an activity. We ask what the term 'design' means today. With inspiration from ecology and nature, and through analyzing the impact of design on society, economy and environment, the course aims to reach practical conclusions on how creative design can contribute to a more sustainable world. Most important of all, you will also have the opportunity to apply design yourself.

We at CEMUS, welcome you to our creative and challenging education that deals with some of the most pressing issues of our times. We hope that you will find your time here exciting, productive and inspiring. With over twenty years of experience of creating and facilitating education for sustainable development, and with the broad competence of Uppsala's two universities, our aim is to offer you the knowledge, skills and tools that are needed to obtain a world that is desirable, fair and sustainable.

Welcome to the course!

Isabel Baudish & Daniela Ceder

Course Coordinators



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1. INFORMATION FLOW

The main communication tool for this course will be Studentportalen: studentportalen.uu.se. Already posted there is the schedule for the course, this course information file and the course reader.

We will be posting updates to the schedule, assignments, readings, feedback and other news on Studentportalen. This means that you need to visit Studentportalen regularly to check for **changes in the schedule** and to upload your assignments. If you have missed a lecture or a seminar you should visit the webpage to make sure you have not missed any important information. Course announcements will be posted on the Studentportalen **Bulletin Board**.

You will need an account for Studentportalen, so please arrange an account as soon as possible! You can find out how you get your account and other information on uu.se/en/students.

Other information can be found on the course portal: <http://www.web.cemus.se/sdesign>

2. LEARNING OUTCOMES

On completion of the course, a 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 economical consequences, risks, possible uses and functions in the work for a sustainable development;*
- *independently apply a specific design theory on a specific challenge within the sustainability field.*

3. COURSE OVERVIEW

This course consists of lectures, design labs and workshops, as well as individual and group assignments. During interactive design labs 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 two part workshop on human centred design will be run on consecutive evenings (see the online schedule for specific times).

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

The course is scheduled to run between 18th January and 24th May, with final course submissions due on the 2nd June.

4. COURSE REQUIREMENTS

In order to pass the course you need to fulfill the following requirements:

- Overall attendance and active participation in at least 75% of classes.
- Satisfactorily complete two individual assignments (Assignments 1 and 2)
- Satisfactorily complete complete one group assignment (Assignment 3)

The course is graded - Fail, 3, 4, 5

Individual **Assignment 2** will be used to give you a grade for this course. However, all course requirements are required to be met in order to pass the course.

Grading will be completed by an external course examiner.

Active Participation

We expect you to be active and inquisitive during lectures, design labs and workshops, as discussions and questions are an established part of each class. The minimum level of active participation is 75% of classes.

If you fall below the minimum 75 % attendance rate you will be given a make-up task(s) instead. There will be one make up task required for every class you are below the minimum threshold. More information about these tasks will be given as the course progresses, in class and on the course portal.

Active participation also includes coming prepared to class. This includes reading the relevant literature, and completing the applicable design activity for a class.

- **Reading:** is often selected by the guest lecturers themselves for discussion and is of high relevance to classes and assignments.
- **Design Activities:** some lectures and design labs will have a short activity attached. This will be posted on studentportalen at least one week before the class and is to be completed by



12:00 pm lunchtime on the Tuesday before class via Studentportalen. Whilst not graded, these activities will ensure you get the most out of each session.

Assignments

Assignments will be issued throughout the course. These assignments are linked to the course goals and objectives, and are designed to give you experience and understanding in sustainable design. These assignments will also be a source of in class discussion.

- Assignment 1: Spaceship Earth (Individual)
- Assignment 2: Analysis of Design (Individual)
- Assignment 3 : Designing for Sustainability (Group)

Assignment 2 will be graded, and form the basis of the course grade.

Assignment 3 will be completed in groups, with an individual reflective component. The groups of 4 will be formed in early March through a facilitative process guided by us, but with the topics and group members chosen by YOU.

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

5. COURSE FORMAT

Most classes will be a mix of the following formats:

Lectures

Lectures are important parts of the learning process where specially invited guest lecturers will focus on sustainable design and the relationship to ecology, culture and human built worlds. These lectures will offer theoretical perspectives give you concrete tools and broader perspectives before and during the implementation phase of the group project. Preparatory literature available on Studentportalen will help develop your understanding of the material discussed in lectures.

Design Labs

Design labs will take place before most lectures. These will be interactive sessions designed to engage with course themes, literature and assignments.

One week before each lab check for the relevant reading and design activity requirements for the lab. Every week there will be literature available to help you prepare for the lab and lecture. Some weeks, depending on the class, design activities will be required to be submitted on Studentportalen by 12:00



pm lunchtime on the Tuesday before the relevant class. These activities are designed to be a 'quick and dirty' way to get your hands stuck into sustainable design in practice!

Please bring a notebook/blank paper and a pen/pencil to design labs as we will be sketching regularly!

Workshops

The workshops will focus on applied sustainable design processes and require your active participation. Similar to design labs, the workshops will typically have preparatory literature and/or design activity tasks. The main distinction from design labs is that workshops will be longer and go more in depth. It is essential you complete these before the session, in order to gain the most from the experience.

Of particular importance is the two part workshop series on **Human-Centred Design**. This workshop will be highly practical and focus on lean design methods. It will help to equip you with a number of key skills ahead of the group design project.

The date for this workshop is as follows (note: the second date falls outside of the regular class time)

Wed 08 March **Workshop: Human-Centered Design Part 1**
17:15 – 20:00 *Students and Course Coordinators*

Thurs 09 March **Workshop: Human-Centered Design Part 2**
17:15 – 20:00 *Students and Course Coordinators*

There will also be a series of weekly workshops that closely mirror the Human-Centred Design process and help you in the development of your design project. These include workshops on DISCOVERING, DEFINING, DEVELOPING and DELIVERING your design. Details for these workshops can be found in the schedule.

Excursions

The opportunity for an excursion may arise later in the Spring. Previous classes have visited Moderna Museet in Stockholm for guided tours. These excursions will be optional and can go ahead if there is sufficient class interest.

Students are also encouraged to self-organise excursions related to their interests around Uppsala and Stockholm. Let us know if you would like any advice or contacts for arranging such a trip!



6. COURSE LITERATURE

Literature for the course is the following:

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.

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. It also will include some audio visual material. Most guest lecturers have also recommended articles to include in this collection. These will be posted on studentportalen throughout the course. (Note: they will not appear on the CEMUS webpage, due to copyright issues).

Student Selected Literature

This will be selected by you, the student, as references for the different assignments. We have a list of suggested books which will be made available on the course portal, as well as Design journals. Additional literature will be of particular relevance to Assignment 2 and 3 where you will need specific material in order to provide an higher depth of analysis.

7. COURSE TEAM

Course Coordinators:

Isabel Baudish, aka Izzie, grew up in Sydney, Australia and studied a combined Bachelor of Renewable Energy Engineering and Development Studies at the University of New South Wales. After an exchange in Uppsala she decided to return for her masters, studying Entrepreneurship at Uppsala and working at CEMUS. She was a student in this course last year and is currently writing her thesis.

Daniela Ceder, aka, Dani, is an international kid, with roots nowadays mainly in Sweden and Mexico. She has a bachelor's degree in International Relations from University of Southampton, and is currently doing her Masters in Sustainable Development here at Uppsala. She has a very varied background academically, dabbling in architecture, engineering physics and behavioural psychology. She has had the opportunity to also work in one way or another with all these topics. She is currently writing her thesis.



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Course Resource Person and Examiner :

Malin Östman is the educational coordinator at CEMUS and has worked at CEMUS since 2012, with a breadth of experience in sustainability, active student participation and transdisciplinary education. She won a Pedagogical prize in 2013 at Uppsala University. She has studied philosophy, American studies, history of art, aesthetics, environment and development studies and anthropology.

Please contact us regarding any aspect of the course.

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Visit us at CEMUS, Geocentrum, Villavägen 16, Uppsala
Telephone: 018-471 27 95
www.cemusstudent.se

8. CEMUS

About CEMUS

CEMUS' aim is 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. In 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

WEB: www.cemus.uu.se

COURSE PORTAL: www.cemusstudent.se



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

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

NEWSLETTER: Sign up at www.cemus.uu.se/cemusnewsletter.html

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 both Uppsala University and SLU (Swedish University of Agricultural Science).

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

CEMUS +25 years Celebration

This year CEMUS is celebrating its 25th birthday! There will be a number of special Jubilee events and festivities organised to celebrate CEMUS and all the people that made it happen, and discussing the past, present and future environment, development and sustainability issues.

Some of these events and festivities include:

- *Open Lectures*
Throughout the semester CEMUS will hold a number of open transdisciplinary lectures on a broad range of themes connected to sustainable development and climate change. Information about these events can be found on the CEMUS webpage. We strongly encourage your attendance to broaden your CEMUS experience!
- *CEMUS Moments – Photos from 1992-2017*
We're looking for your photos of your CEMUS moments. We'll post a minimum of one photo per week on Instagram and Twitter (highlights on Facebook), and we need your help to gather photos. Send photos as any image-file and add description as text or



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word-file, both as attachments, to: cemus25_4b8a@sendtodropbox.com (No text in email can be read or is added to the box) If you have a massive collection of CEMUS photos it's better to snail-mail them to CEMUS, Geocentrum, Villavägen 16, 752 36 Uppsala.

- *The CEMUS Diaries – Stories from past, present and future*

As part of the jubilee we are doing a story/essay series that will be published every week throughout the year. The title for this is “The CEMUS Diaries – Stories from past, present and future” and it will be a series of short stories written by present and former staff, students, work group members, associates etc.

The format and style is at the moment very loose and open. It can be short articles, novels, poems, memories, funny anecdotes. It can be a look-back at past times, a reflection of the contemporary or a prediction of the future. It can be text, videos, art etc. Together it will cover a wide range of narratives, perspectives and personalities that somehow are all connected to CEMUS. These stories will then be posted on our webpage, Facebook and CEMUSE magazine and in the end of the year put together in some kind of publication as well.

CONTACT // cemus25@cemus.uu.se

CEMUS Courses

This Spring CEMUS is offering the following courses:

- Hållbar utveckling B, 30 hp
- Actors and Strategies for Change: Towards Global Sustainabilities, 7.5 credits
- Sustainable Development - Project Management and Communication, 15 hp
- Sustainable Design – Ecology, Culture and Human Built Worlds, 7.5 credits
- Hållbar utveckling – värderingar, världsbilder och visioner, 15 hp
- Climate Change Leadership: Power, Politics and Culture, 15 credits
- Teknik, makt och mänsklighetens framtid, 7.5 hp
- Livsfilosofi och det moderna samhället, 7.5 hp
- Sustainable Development – Worldviews and Discourses – A Seminar Series, 5 credits

CONTACT: Study Counsellor Amanda Johnson // susdev@geo.uu.se

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



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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 hosts 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.

The project cafe this semester is scheduled for:
Thursday, Jan 26, 15:15-17:00
CEMUS Library/Lounge, Villavägen 16, Geocentrum

CONTACT: Sara Andersson // sara.andersson@csduppsala.uu.se

CEMUS Research Forum

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

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
www.facebook.com/CEMUSRoots



9. PRACTICAL INFORMATION

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 need 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, you first need to be registered to a course.'

As a **new student** you need to have a current course registration to obtain a campus card. You also need to activate your user account beforehand, to be able to receive the email containing campus card instructions.

Information on how to activate your user account can be found at <https://konto.weblogin.uu.se/index.html>. The instruction message is usually sent out 24 hours after the activation, but sometimes it can be a delayed a further day. Instructions on how to obtain your campus card will be sent to the e-mail address registered to you in the student database. Once you have ordered the card according to the instructions, you will be notified via e-mail when your card is available for pickup at your campus reception desk. When you collect the campus card you will need to show an approved identification (driver's licence, passport etc).

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 'cafe', 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.

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

Important Locations

There are two main locations for this course:

- Blåsenhus 12:004, meaning House 12, Ground Floor, Room 4.
- Blåsenhus 11:128, meaning House 11, First Floor, Room 28.

There will be a few class locations that differ from this. All locations will be available in the schedule. Changes will also be communicated in more detail through Studentportalen.



We look forward to an exciting semester!

// Isabel, Dani and Malin