



## **The Precautionary Principle in Sustainability Transitions: Thinking forwards, Looking backwards, Acting**

### **Summer course description**

CEU Summer University 2018

**June 28 – July 4, 2018**

A European Environment Academy (EEAcademy) Summer School co-organised by Central European University, the European Environment Agency, Bridging for Sustainability and Erda RTE .

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## THE SUMMER COURSE IN BRIEF

SUMMER COURSE TITLE	<b>The Precautionary Principle in Sustainability Transitions:</b> Thinking forwards, looking backwards, Acting
ACADEMIC DISCIPLINE(S)	Environmental Sciences, Environmental Governance, Science and Technology Studies, Transition studies.
DATES	June 28 – July 4, 2018
TARGET AUDIENCE	Researchers (advanced PhD students, postdocs) and practitioners from policy-making institutions, NGOs, business and international organizations.
LEVEL OF THE COURSE	Postgraduate
TYPE OF COURSE	Strategic knowledge and experience sharing course
COURSE DIRECTORS	Sybille van den Hove <sup>1</sup> , Ruben Mnatsakanian <sup>2</sup> , Anton Shkaruba <sup>2,3</sup> , David Stanners <sup>4</sup>
INSTITUTIONS	<sup>1</sup> Bridging for Sustainability, Clavier, Belgium <sup>2</sup> Central European University, Budapest, Hungary <sup>3</sup> Erda RTE, Rijswijk, The Netherlands <sup>4</sup> European Environment Agency
CONTACT INFORMATION	E-MAIL <a href="mailto:anton@mespom.eu">anton@mespom.eu</a> / <a href="mailto:Sybille@b4sd.eu">Sybille@b4sd.eu</a>
COURSE SUMMARY	<p><b>The Precautionary Principle in Sustainability Transitions:</b> Thinking forwards, looking backwards, Acting</p> <p>The purpose of this School is to explore challenges and possible ways forward for the effective and appropriate application of the precautionary principle in the context of transitions to sustainability. It will bring together a solid and diverse group of scholars and practitioners with expertise on the precautionary principle, risk assessment and management, environment and health research, science and technology studies, the governance of innovation, environmental governance, long term transitions to sustainability and business transformation.</p> <p>The School is designed as a strategic knowledge and experience sharing course at the intersection between a research-oriented course and a professional development course, dedicated to collaborative exploration and learning. It will provide intensive research training, but also allow for policy discussions in a variety of sector and contexts and, through a knowledge co-creation approach, help to identify and find solutions to course-related issues in the participants' research or policy application fields.</p>

## FACULTY

The teaching team includes experts on the precautionary principle, environmental and risk governance, and the issues addressed in the case studies. The faculty is made of highly skilled scholars and practitioners with broad experience in interdisciplinary research, integrative policy-making and business. The team includes the Executive Director of the European Environment Agency, the former Senior Advisor of EEA who was the 'Late Lessons' project leader, the former Chair of the Scientific Committee of EEA, as well as professors from renowned Universities and research centres, and Business executives. The final list of

<b>Dr. Hans Bruyninckx</b>	Executive Director, European Environment Agency (EEA), Copenhagen, Denmark.
<b>Dr. Sarah Cornell</b>	Senior Researcher, Stockholm Resilience Centre, Sweden
<b>Mr. David Gee</b>	Former Senior Advisor 'Science, Policy, Emerging Issues' & Late Lessons from Early Warnings project leader, European Environment Agency, Copenhagen, Denmark.
<b>Prof. Philippe Grandjean</b>	Professor, University of Southern Denmark, Odense, Denmark & Adjunct Professor of Environmental Health, Harvard University, Boston, USA.
<b>Prof. Steffen Foss Hansen</b>	Associate Professor, Technical University of Denmark, Kongens Lyngby, Denmark.
<b>Dr. Sybille van den Hove</b>	Executive Director, Bridging for Sustainability, Belgium & Director, IBA, Louvain-la-Neuve, Belgium
<b>Dr. Jock Martin</b>	Head of Integrated Environmental Assessments (IEA), European Environment Agency, Copenhagen, Denmark.
<b>Mr. Pierre Mottet</b>	Chairman of the Board, IBA, Belgium & Founder of the Seed Equity & Sustainable Entrepreneurship fund (Se'nse), Belgium
<b>Prof. Ruben Mnatsakanian</b>	Professor, Environmental Sciences & Policy Dept. Central European University, Budapest, Hungary.
<b>Dr. Anton Shkaruba</b>	Research affiliate, visiting lecturer, Environmental Sciences & Policy Dept. Central European University, Budapest, Hungary, Director, Erda RTE, Rijswijk, The Netherlands
<b>Dr. David Stanners</b>	Head of Partnerships and Networks, European Environment Agency, Copenhagen, Denmark.
<b>Dr. Xenia Trier</b>	Green Economy Group, European Environment Agency, Copenhagen, Denmark.

Final composition of the faculty to be confirmed.

## COURSE RATIONALE

The precautionary principle is a key principle of environmental governance. It features prominently in many international environmental policy processes, texts and treaties and in national strategies and laws of many countries.

It is one of the four environment principles in the Treaty of the European Union, in which article 191,§2 states that Union policy on the environment *"shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay."* Together these 4 principles –precaution, prevention, polluter-pays and rectification of damage at source– are central to managing risk to the environment, human health and well-being. The most problematic of these principles is without doubt the precautionary principle.

The precautionary principle poses challenges to both environmental science and environmental governance because it applies to *'situations of scientific complexity, uncertainty and ignorance, where there may be a need to act in order to avoid, or reduce, potentially serious or irreversible threats to health and/or the environment, using an appropriate strength of scientific evidence, and taking into account the pros and cons of action and inaction and their distribution'* (see the working definition of the precautionary principle proposed by the European Environment Agency – EEA 2013, p. 681). As a tool to manage risks, uncertainties and ignorance in complex social ecological systems, it is a core element of governance for a transition towards sustainability.

The principle is subject to a variety of interpretations, at the heart of major controversies and the target of serious attacks, sometimes because of misinterpretations, sometimes because of the vested interests it may be thought to disturb.

As shown by the seminal work of the European Environment Agency in the two *'Late Lessons from Early Warnings'* reports (EEA 2001, 2013) there are still many open and pressing questions around the precautionary principle and its application, ways of doing research, science-policy-society interfaces, the governance of innovations and risk governance in the framework of sustainability transitions and progress towards the Sustainable Development Goals. And, in the current political context, notably in the European Union, there is a need for intellectual rigour around the concept, both from a research and a praxis point of view.

## PURPOSE & OBJECTIVES

The purpose of this European Environment Academy (EEAcademy) Summer School is to explore challenges and possible ways forward for the effective and appropriate application of the precautionary principle in sustainability governance. It will bring together a solid and diverse group of scholars and practitioners with expertise on the precautionary principle, risk assessment and management, environment and health research, science and technology studies, the governance of innovation, environmental governance, long term transitions to sustainability and business transformation.

The School is designed as a strategic knowledge and experience sharing course. It will provide intensive research training, but also allow for policy discussions in a variety of sector and contexts, and help to identify and find solutions to course-related issues in the participants' research or policy application fields.

The three core objectives of the course are:

- (1) to facilitate co-construction and transfer of knowledge on an important research areas and cross-cutting issues of environmental science and praxis;
- (2) to build capacity for high quality environmental research that is adequate, efficient and oriented towards the international research community; building on interdisciplinary

approaches and concepts, most recent findings and state-of-art and policy relevant research objectives and praxis;

- (3) to build capacity in both the research and the praxis community on issues related to the Course subject.

This course is the fourth edition of the highly successful 2015, 2016 and 2017 SUN courses on the precautionary principle. This year's specific framing of the course will be precaution in the context of sustainability transitions. This is particularly timely given the current intensity of political, policy and scientific discussions around transitions and the Sustainable Development Goals, in Europe and across the world.

The course will promote the values of open society and self-reflective critical thinking through developing capacity for the creation of new knowledge in transdisciplinary environmental research and sustainability governance, and through the search for better ways to convert scientific knowledge to useful practical knowledge, and policy questions to research questions.

## **PARTICIPANTS**

### **Group composition:**

We aim to achieve a mix of participants and faculty from a variety of backgrounds (including both researchers and practitioners from public bodies, NGOs and business) and research interests related to the Course; the purpose is that during group work and discussions the participants will share their knowledge and experience and benefit from the diversity.

### **Pre-requisites for the course**

Participants to be selected to the school shall meet the following criteria:

- hold positions at universities, research institutions, consultancies, business, relevant public bodies and administrations (including the European Institutions) or a research-oriented NGO;
- have MSc or PhD degree or equivalent and at least two years of research or professional experience or/and teaching at graduate level;
- be fluent in English;
- have demonstrable achievements in research or in praxis;
- demonstrate good communication skills;
- demonstrate originality and motivation in their application letter.

## **COURSE STRUCTURE**

### **Themes and case studies**

The school will be organised around five themes:

1. Transitions to sustainability
2. History and foresight
3. Innovation, risks, opportunities and business
4. Science and Precaution
5. Precaution and innovations in governance

Themes will be illustrated by case studies, including some from the '*Late Lessons from early warning reports*'. Participants will have to complete course pre-reading (see section on background readings below).

The course schedule will alternate between lectures, discussions, and group work around theoretical issues and case studies.

The total course load including tutoring and group work is 56 academic hours.

### **Pre-course assignments**

As part of their application, participants will be asked to propose a specific research question in relation to the topic of the School, which they intend to explore in more depth during the School.

Upon confirmation of their participation, they will be asked to do some background reading and write a very short first essay explaining their "*problématique*". Addressing such an open question can be somewhat challenging for participants with non-academic background. This will be addressed through a differentiated approach to various target groups of participants (e.g. by expecting outputs of more academic nature from the participants with academic backgrounds), and by tailoring our pre-course work to the needs of specific target groups (e.g. advising practitioners on their *problématiques* based on their experience and their specific needs).

### **Participants' contributions during the course**

During the course, participants will be organised in 5 groups, each addressing one of the themes of the school (*Transitions to sustainability; History and foresight; Innovation, risks, opportunities and business; Science and Precaution; Precaution and innovations in governance*). School conveners will ensure that groups are balanced. Participants will contribute to their group building on their competencies and specific background, initial reflections, and their learning during the school. They will also share with other groups and members of faculty throughout the week.

Groups will be working with faculty members each day for a 90 minutes session and for a whole morning on the last day. Additional group work can take place during the integration day. Groups will be asked to present their result to everyone on the last afternoon.

As input to their group work, participants of each group will also be asked to prepare summaries of the sessions corresponding to their theme (including the plenary discussions).

Progress with the group works will be discussed during the course as appropriate.

Options for the publication of a post-school synthesis report will be discussed by the course organisers and faculty, school participants will be kept informed of that process and invited to contribute as appropriate.

The in-school phase is structured around the five themes (see Tentative course schedule below). Case studies will be presented and worked on during the whole Course. They will serve to illustrate the lectures and provide practical material for the group works and discussions. Beyond what will be discussed during the week, all case studies in the two '*Late Lessons*' volumes are relevant and participants are encouraged to explore those case studies that are of most interest to them.

A lot of the learning will take place through discussions and group work. Participation in these discussions will require some prior knowledge of the issues raised in presentations. To secure this the course participants will get their background reading requirements two months before the course starts.



The further networking of course participants will be supported by a designated Facebook group or LinkedIn to be set up on the stage of distant learning.

## **Background readings**

EEA (2001). *Late lessons from early warnings: the precautionary principle 1896–2000*. European Environment Agency Environmental issue report No.22, Office for Official Publications of the European Communities, Luxembourg.

EEA (2013). *Late Lessons from Early Warnings: Science, Precaution, Innovation*. EEA Report N°1/13.

The course builds directly on the two landmark reports on the precautionary principle produced by the European Environment Agency (EEA) in 2001 and 2013. These reports contain a collection of chapters on and around the precautionary principle. Some chapters are case studies covering a broad range of issues, across time and space; others are more synthetic or theoretical reflections on the issues. The two volumes have been prepared by EEA in collaboration with a broad range of external authors and peer reviewers. Many of the faculty are contributing authors in these reports.

Together, the bibliographic references of the two volumes constitute an academic gold mine of references on the precautionary principle, in particular the references of chapters 27 and 28 of volume 2.

As the two 'Late Lessons' volumes are extensive and dense (almost 1000 pages in total), participants will be directed to a series of specific chapters which will constitute mandatory background reading and will be asked to select a number of additional chapters, depending on their interest.

Both volumes can be downloaded for free at:

- [http://www.eea.europa.eu/publications/environmental\\_issue\\_report\\_2001\\_22](http://www.eea.europa.eu/publications/environmental_issue_report_2001_22)
- <http://www.eea.europa.eu/publications/late-lessons-2>

Some faculty members may require additional pre-reading, this will be communicated to participants in due time.

Participants will also be expected to familiarise themselves with the profiles of other course participants and faculty. By the beginning of the course participants will be asked to send their biosketches and their research question after approval by the Course directors; they will be put together in a directory and circulated in advance to the school faculty and the class.

## **Course schedule**

The Course will comprise a total of 24 in-class sessions of 90 minutes (including group work with faculty), and a full day of integration when groups can organise as they see fit. The course corresponds to 2 ECTS (European credits transfer system).

Annex 1 provides a tentative course schedule for the Summer School 2018. It may vary as speakers confirm their availabilities. The final schedule will be available in the Spring.



## **INTEREST AND EXPECTED OUTCOMES FOR PARTICIPANTS**

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Practitioners: elements for development of solid and well justified policy praxis, risk assessment and management strategies, including use of the precautionary principle as appropriate.

Researchers: tools to contribute to address the many open and pressing research questions around the precautionary principle, the governance of innovations and risk governance in the framework of sustainability transitions.

Expected outcomes:

- increased theoretical and practical expertise on issues surrounding the precautionary principle and sustainability transitions;
- training in inter- and transdisciplinary research and integrative policy praxis;
- a strong networking effect between participants and faculty.

## **ASSESSMENT OF PARTICIPANTS` PERFORMANCE IN THE COURSE AND EXPECTED OUTCOMES**

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By the end of the course the participants will prepare and present the group works developed during the course.

# ANNEX 1: COURSE SCHEDULE

Course **The Precautionary Principle in Sustainability Transitions (Draft programme - December 19, 2017)**  
 Classroom **DRAFT - Final schedule is subject to change**  
 Seminar room  
 Date **June 28 - July 4, 2018**

		June 28, Thursday	June 29, Friday	June 30, Saturday	July 1, Sunday	July 2, Monday	July 3, Tuesday	July 4, Wednesday
<b>Theme</b>		<b>Transitions to sustainability</b>	<b>History and Foresight</b>	<b>Innovation, risks, opportunities and business</b>	<b>Group work and integration</b>	<b>Science and Precaution</b>	<b>Precaution and innovation in governance</b>	<b>Presentations and Conclusions</b>
8:45 - 9:00		Course opening: Presentation of CEU & EEA	Feedback from previous day	Feedback from previous day	Integration / Group Work	Feedback from previous day	Feedback from previous day	Feedback from previous day
9:00-10:30		Course concept and objectives Group work organisation (Jock Martin, David Stanners, Ruben Mnatsakanian, Sybille van den Hove, Anton Shkaruba) + Introduction of participants - Intentions for the week	The late lessons approach: historical learning from case studies (David Gee)	Technological innovation, risk and precaution: The case of nanotechnologies (Steffen Foss-Hansen)	Integration / Group Work	Science, anticipation and precaution: human health as a core element of sustainability. (Philippe Grandjean)	Global megatrends for Sustainability Governance (Jock Martin)	Thinking forwards, Looking backwards, Acting (TBC)
10:30-11:00		Break	Break	Break	Break	Break	Break	Break
11:00-12:30		Long-term transitions to sustainability (Hans Bruyninckx)	Precaution and foresight (TBC)	The precautionary principle from the perspective of a business entrepreneur (Pierre Mottet)	Integration / Group Work	The green economy, chemicals and precaution (Xenia Trier)	Precautionary science, unprecautionary governance? The case of ionising radiation (Anton Shkaruba)	Group work
12:30-13:45		Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
13:45-15:15		Planetary Boundaries: a complex (eco)systems perspective (Sarah Cornell)	(Un)precautionary decision-making: learning from history and dealing with legacy (Ruben Mnatsakanian)	Trying somebody else's shoes: a perspectivist approach to the pp - Workshop (Sybille van den Hove)	Integration / Group Work	Creative thinking for Sustainability - Workshop (Constanța Belchior)	The Precautionary Principle: Its Legal Implications (Owen McIntyre)	Group work presentations and discussions
15:45-16:15		Break	Break	Break	Break	Break	Break	Break
16:15-17:45		Group work with faculty	Group work with faculty	Group work with faculty	Integration / Group Work	Group work with faculty	Group work with faculty	Landing what we have learned (David Stanners)
								Summer School Closing: certificates and goodbyes
								<b>End of Summer School</b>
Evening	Arrivals Informal meeting with the school directors on the stairs of Szent Istvan Bazilika 20.00	17:50 - 18:40 Group work self-organisation		Summer School dinner				

### Colour key

Lectures and discussions

Introduction, Conclusion, Organisation

Group Work

Skills training, tutoring and presentations