



Aalto University

# Course Design

PED-131.2210


*Teaching session I, 26.10.2020*  
*Tiina Pylkkönen & Miia Forsten*

1

## Today's schedule

<b>9.00</b>	<b>Practical issues</b>
<b>9.10</b>	<b>Curriculum work</b>
<b>10.00</b>	<b>break</b>
<b>10.15</b>	<b>Constructive alignment</b>
	<b>Intended learning outcomes</b>
<b>11.25</b>	<b>break</b>
<b>11.30</b>	<b>Paula Schönach: Education for sustainable development and key competencies</b>
<b>12.30</b>	<b>End of session</b>

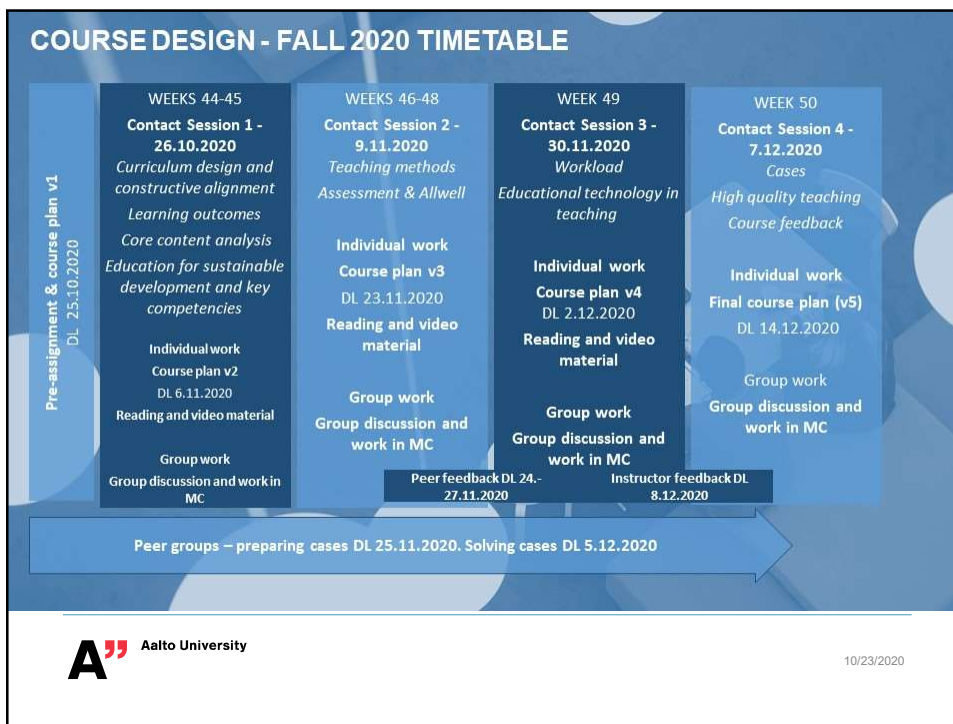
---



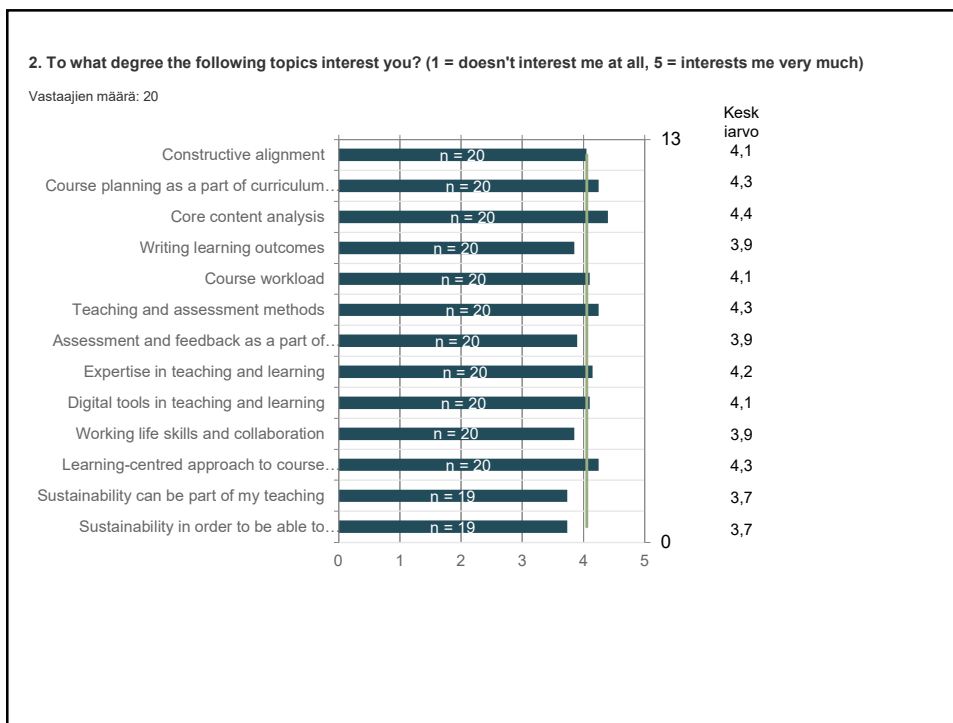
Aalto University

10/23/2020

2



3



4

## Learning outcomes for topic one,

After this topic you will be able to ...

...**recognize** the importance of curriculum work in course design,

...**identify** the importance of the constructive alignment,

...**practice** how to set learning outcomes,

...**select** the content based on the idea of core curriculum.

...**understand** the importance of sustainability in education.

In addition, you have got to know each other.



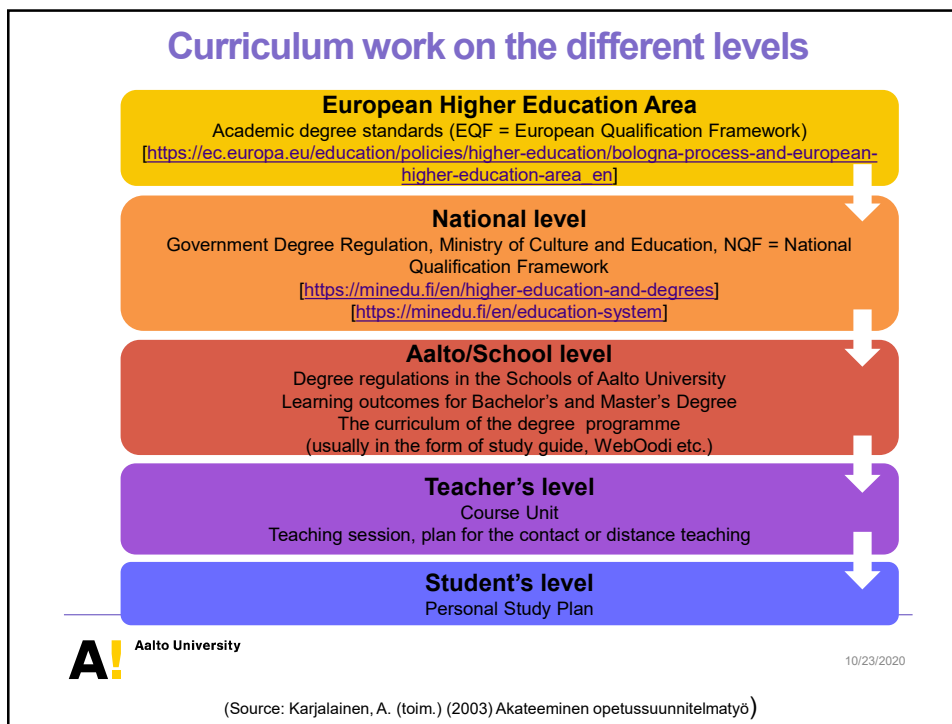
10/23/2020

5

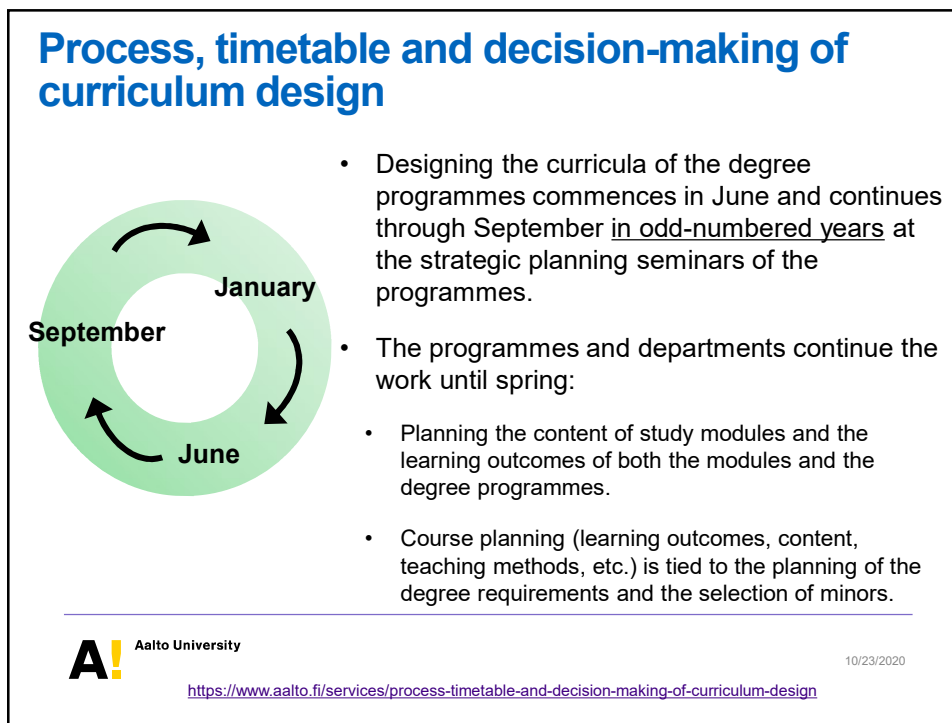


# Curriculum work

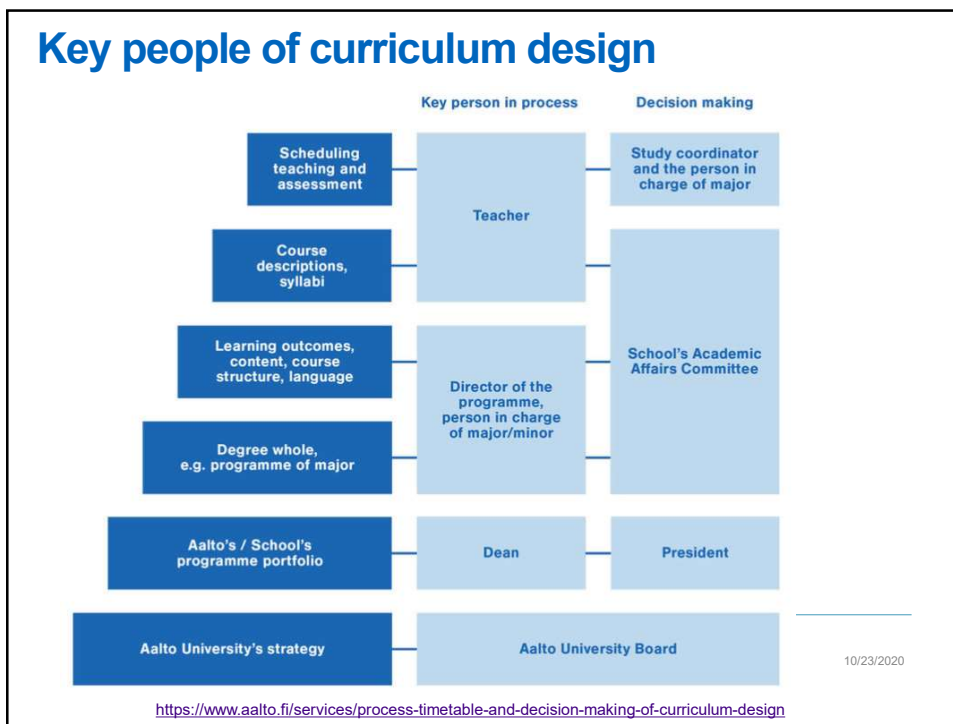
6



7



8



9

## Changes during the approved curriculum

By decision of teacher	By decision of head of department (or similar)	Through academic decision-making	Not allowed
<p style="text-align: center;"><b>Changes to course brochure:</b> implementation plan, detailed assessment criteria and contents etc.</p> <p style="text-align: center;"><b>No later than 3 weeks before the course starts</b></p>	<p style="text-align: center;"><b>Changes in persons in charge of programmes, study modules and courses</b></p> <p style="text-align: center;"><i>As necessary</i></p> <div style="background-color: #0070C0; color: white; padding: 2px; text-align: center; font-weight: bold;">By decision of director of degree programme</div> <p style="text-align: center;">In collaboration with timetable planning: changes to the <b>weekly timetable of courses</b></p> <p style="text-align: center;"><b>By the start of the term in which the course is implemented</b></p>	<p style="text-align: center;"><b>Course basic information</b> (e.g. language, scope, teaching period)</p> <p>Changes to <b>course description details</b> (e.g. learning outcomes, assessment methods)</p> <p style="text-align: center;">Additions to <b>course selection</b></p> <p style="text-align: center;"><b>By the start of the term in which the course is implemented</b></p>	<p style="text-align: center;"><b>Adding study modules to the programme and establishing a minor</b></p> <p style="text-align: center;"><b>Changing the learning outcomes, basic information and contents of the programme and study modules</b></p> <p style="text-align: center;"><b>Discontinuing study modules*</b></p> <p style="text-align: center;"><b>Discontinuing courses</b> included in the degree requirements*</p>

\* While decisions can be made in advance, they will not take effect until the start of the next 2-year curriculum period.

<https://www.aalto.fi/services/changes-to-a-currently-valid-curriculum>

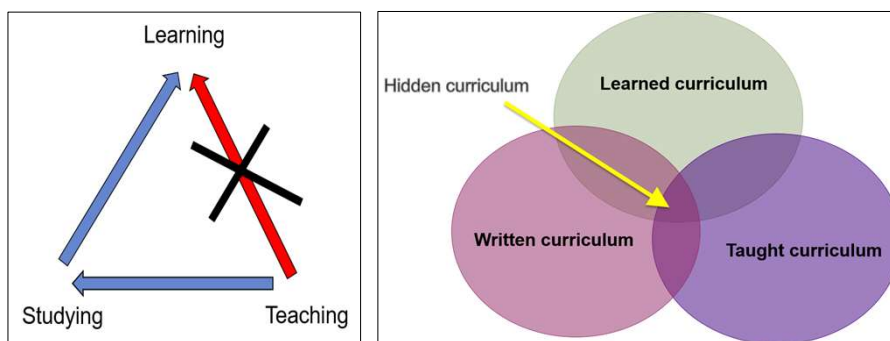
10

## Steps of the curriculum work in a course level

Essential question	What needs to be taken into account
What is being studied / taught?	Learning outcomes, content planning
Why precisely this?	Justifications for the course outcomes and contents, core content analysis
How?	Methods of studying and teaching
In what time?	Duration, student workload
In what order?	Pacing, timing, structure
By what means?	Learning and teaching materials
Assessment of learning	Feedback on student work
Evaluation of teaching	In proportion with the outcomes

11

## Different aspects of curriculum work



12

## Group discussion

- How do you do curriculum work in your programme?
  - Who leads the curriculum work in paper/ in practice in your programme/ school?
  - How do you participate?
  - What good practices your programme has relating to the curriculum work?
- Is there anything you think could be done in a different way in your programme / school?

13

## Break

14




# Constructive alignment

15

## Curriculum map

Program level learning outcomes	Courses				
	C1	C2	C3	C4	C5
Written communication	introduced		emphasized	reinforced	
Oral communication	Covered incidentally	introduced		emphasized	
Critical thinking	introduced	introduced	introduced	emphasized	
Problem solving skills	Covered incidentally	Covered incidentally		Covered incidentally	
...					



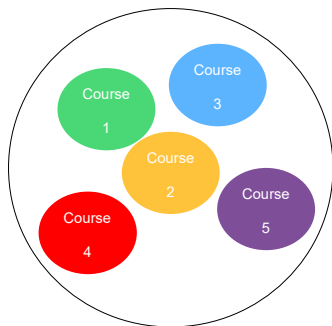
10/23/2020

16



## Alignment in curriculum and cumulative competencies

Degree ≠ collection of different courses!



Degree = well-designed and aligned body of courses, where cumulation of knowledge and competencies have been considered.

	Year 1	Year 2	Year 3
Content 1	Course 1 →	Course 2 →	Course 3
Content 2	Course 1 →	Course 2 →	Course 3
Content 3	Course 1 →	Course 2 →	Course 3
Content 4	Course 1 →	Course 2 →	Course 3
Competencies	Group work	Project management	Communication

17

## Sharing best practices

How is the co-operation between courses organized in your department? Do you negotiate with other teachers about the contents and learning outcomes (possible overlap and the suitable amount of overlap)?

18

## Constructive alignment (CA) (J. Biggs)

**Major steps:**

1. Defining the intended learning outcomes (ILOs)
2. Choosing teaching/learning activities likely to lead to the ILOs
3. Assessing students' actual learning outcomes to see how well they match with the intended learning outcomes

---

Aalto University
10/23/2020

19

## Course level: CA check

ILO's	Teaching method	Learning activity	Assessment	Feedback to students	Feedback to teacher
ILO1					
ILO2					
ILO3					
ILO4					
ILO5					

**CA = constructive alignment**  
**ILO = intended learning outcomes**

---

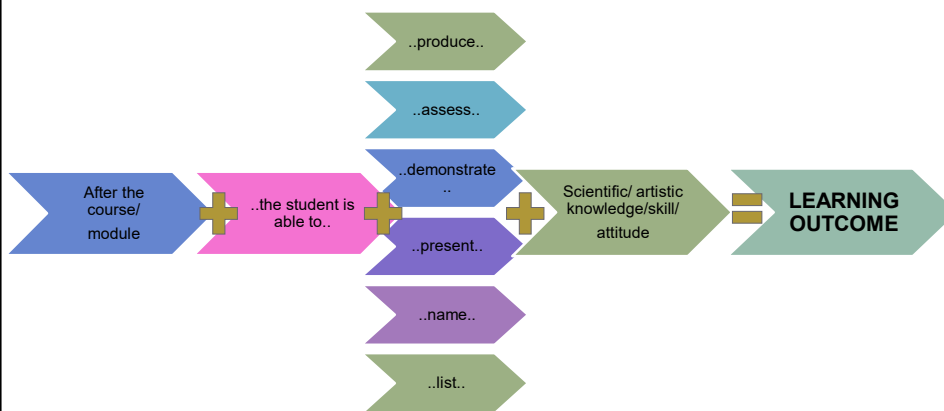
Aalto University
10/23/2020

20

# Learning Outcomes

21

## Creating learning outcomes



22

## Levels of knowledge

Bloom's revised taxonomy (Krathwohl, 2002; Bloom, original 1956; 1990)

<b>Create</b>	Review, interpret, justify, predict
<b>Evaluate</b>	Categorize, generalize, to lead, plan, prepare, propose
<b>Analyze</b>	Analyze, organize, calculate, categorize, classify, compare, merge, criticize, try
<b>Apply</b>	To apply, select, add to, build, develop, produce, proportion, use.
<b>Understand</b>	Change, classify, defend, distinguish, discuss, explain, generalize
<b>Remember</b>	To describe, locate, identify, list, remember to name, to tell

**A!** Aalto University 10/23/2020

23

## Affective domain

<b>5. Characterisation</b>	act, adhere, appreciate, ask, accept, answer, assist, attempt, challenge, combine, complete, conform, cooperate,
<b>4. Organisation</b>	defend, demonstrate (a belief in), differentiate, discuss, display, dispute, embrace, follow, hold, initiate, integrate, justify, listen, order, organise, participate,
<b>3. Valuing</b>	practice, join, share, judge, praise, question, relate, report, resolve, share, support, synthesise, value
<b>2. Responding</b>	
<b>1. Receiving</b>	

Declan Kennedy, Áine Hyland, Norma Ryan. Writing and Using Learning Outcomes: a Practical Guide. [http://www.tcd.ie/teaching-learning/academic-development/assets/pdf/Kennedy\\_Writing\\_and\\_Using\\_Learning\\_Outcomes.pdf](http://www.tcd.ie/teaching-learning/academic-development/assets/pdf/Kennedy_Writing_and_Using_Learning_Outcomes.pdf)

**A!** Aalto University School of Business 10/23/2020

24

## Psychomotor domain

5. Naturalisation	Adapt, adjust, administer, alter, arrange, assemble, balance, bend, build, calibrate, choreograph, combine, construct, copy, design, deliver, detect, demonstrate, differentiate (by touch), dismantle, display, dissect, drive, estimate, examine, execute, fix,
4. Articulation	grasp, grind, handle, heat, manipulate, identify, measure, mend, mime, mimic, mix, operate, organise, perform (skilfully), present,
3. Precision	record, refine, sketch, react, use.
2. Manipulation	
1. Imitation	

Declan Kennedy, Áine Hyland, Norma Ryan. Writing and Using Learning Outcomes: a Practical Guide. [http://www.tcd.ie/teaching-learning/academic-development/assets/pdf/Kennedy\\_Writing\\_and\\_Using\\_Learning\\_Outcomes.pdf](http://www.tcd.ie/teaching-learning/academic-development/assets/pdf/Kennedy_Writing_and_Using_Learning_Outcomes.pdf)

**A!** Aalto University School of Business 10/23/2020

25

## Core content analysis

<b>Must know (80 %)</b>	Core content: necessary to manage in order to be successful in the future studies. Understanding must know content allows deep and broad knowledge acquisition
<b>Should know (15%)</b>	Complementary knowledge: adds theoretical details and clarifies the more unusual applications
<b>Nice to know (5%)</b>	Special knowledge: deepens the management of content

**A"** Aalto University 10/23/2020

26

## Your turn: Learning outcome analysis

Intended Learning Outcomes (ILO) describes the knowledge, skills and attitudes, that are expected students to know/master at the end of the course in order to get an approved grade.

Outcomes are set from the student's perspective → student centeredness

Outcomes are clear and simply expressed, and they must be achievable and can be estimated.

**Review and analyze the learning outcome descriptions in your own course. Analyze the learning outcomes of your course by the above-mentioned aspects.**

1. Are the outcomes formed like they are supposed to according to the definition of learning outcomes? Why are they / are not?
2. Whose point of view have they been drawn?
3. How are they related to the content?



10/23/2020

27

## Your turn: Core content analysis

Module, block or a single course of a study	MUST KNOW	SHOULD KNOW	NICE TO KNOW
Knowledge			
Skills			
Attitudes			

10/23/2020

28



Aalto University

# For the next teaching session

1. Prepare the version 2.0 of your course plan
2. Reading tasks, videos ->group work
3. Questionnaire for ICT workshops

29

## 1. Course plan, version 2.0 DL 6.11.2020

- As a pre-assignment, you have already written about the basic information and course connections on other courses. Continue the work by adding text to the following themes (see the course plan template):
  - ✓ Course connections on programme level learning outcomes (you can use for example Table 1, see the course plan template )
  - ✓ Content (for example core content analysis)
  - ✓ Intended learning outcomes (including also skills such as group work, presentation skills etc.)



Aalto University

10/23/2020

30

1. Basic information:

- name of the course
- Amount of ECTS
- teaching period(s) when the course is taught
- language of the course
- Target group (Bachelor's / Master's course / Doctoral course)
- Is the course elective or mandatory

2. Course connections on:

- Other courses: which module course belongs to, connections with other courses, previous knowledge required and what knowledge does this course offer to other courses (e.g., is this course a pre-requisite for some other course(s))
- **Course connections on program level learning outcomes (you can use Table 1, see the template)**

3. Content (for example core content analysis)

4. Intended learning outcomes (including also skills such as group working, presentation skills etc.) (you can use Table 2, see the template)

5. Teaching methods

- Give examples of teaching sessions, assignments ...
- How do you use digital tools/platforms in your course (e.g. Wiki, MyCourses, Adobe Connect, A+, Rubryic, Preemo...)

6. Assessment: methods, criteria, scale

7. Course workload (both from students and the teachers side)

8. Materials used during the course

9. How & when & on what you give feedback to students

10. How & when & on what students give feedback to course teacher(s) and how is it utilized?

---

**A!** Aalto University 10/23/2020

Homework 1:  
CP version 2

31

## Group responsibilities

- 1. Agree on the dates when you are going to meet. Who will send the invitations? Is it teams or zoom? How many meeting do you need (5 hour reserved for every topic)**
- 2. Read the articles and see the videos before your meeting**
- 3. In the meeting see the instructions in MC**

**Group assignment:**

1. Before your first group meeting:
  - Watch the videos
    - Unips-video: Learning Outcomes
    - Unips-video: Core Content Analysis
  - Familiarize yourself with given reading material which you can find below.

In the meeting together with your group use the Flingas (below) to list new ideas and questions. Other groups are working on the same flingas. Respect their opinions, but you can of course comment them. **DL 8.11.2020**

---

**A!** Aalto University 10/23/2020

32



## Peer groups

### Spring

Kalle Kytölä  
Junhe Lian  
Mehmet Ilter  
Myrto Chliova  
Tommi Kakko

### Summer

Jara Uitto  
Osiris Valdez  
Banda  
Mahdi Pourakbari  
Kasmaei  
Mariam Durrani  
You Liu

### Autumn

Jose Lado  
Kari Jalonen  
Senni Kirjavainen  
Zachary Taylor  
Nuria Solsona  
Caba

### Winter

Elisa Mekler  
Barbara Keller  
Mikko Suominen  
Simo Puintila  
Vikash Sinha

# Thank you!