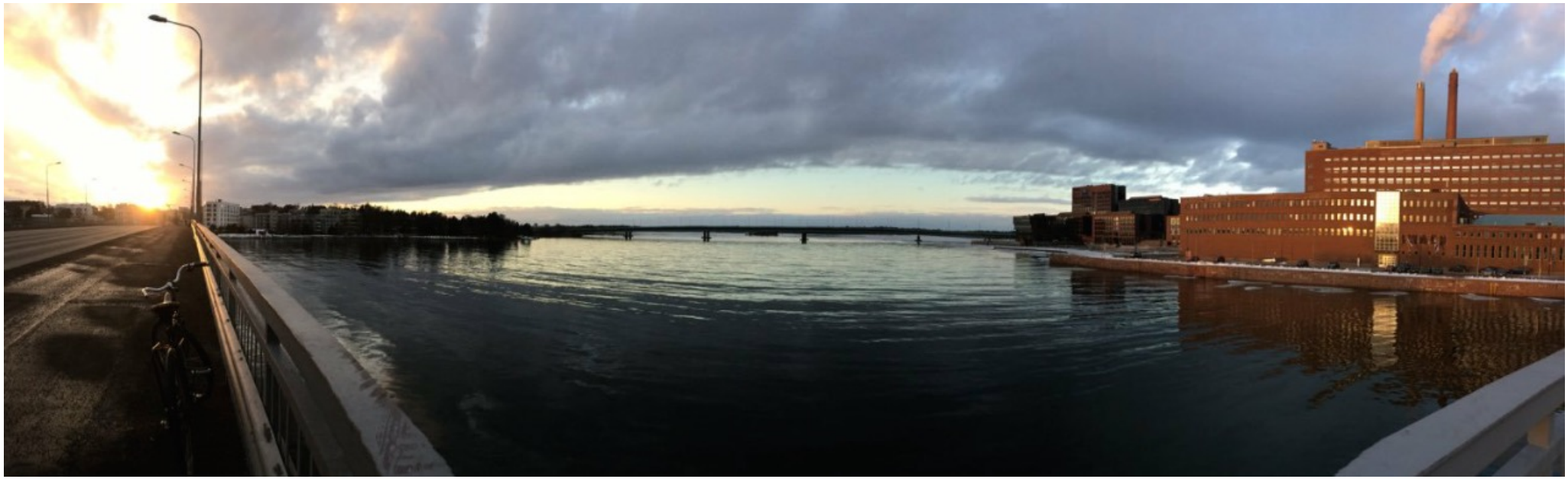


WELCOME TO WAT COURSE!

Marko - 5.9.2022

OBJECTIVES FOR TODAY MORNING

1) Understand the **concept** of WAT Course

→ Structure, assignments, assessment + 'meta-themes'

2) Discuss and agree **how Group Work works**

→ Also setting up your group's own Rules of Work

SO STARTING QUITE EASY – BUT WITH FUNDAMENTALS

→ Today lays the foundation for the rest of WAT Course

AGENDA

9.00- Introductions: forming WAT Course groups

Introduction to WAT Course

WAT Essential elements

BREAK

~10.30- Session on team roles and group work

→ Different phases and roles in the group

→ Project & time management

→ *First group work task (submit to MyCourses):*
agree on your own Rules of Work for your group

ANY QUESTIONS / SUGGESTIONS?

INTRODUCTIONS
Who are we?

MARKO KESKINEN

Associate professor,
WAT Programme Director
+ WAT Course Teacher

Interested in water resources management, sustainability, governance – and WAT!

people.aalto.fi/marko_keskinen

TEEMU KOKKONEN

Senior University Lecturer,
Coordinating the Weekly Exercises of WAT course

Interested in hydrological modelling urban hydrology + geospatial computing

people.aalto.fi/teemu_kokkonen

KIELO ISOMÄKI

Course assistant

3rd year WAT student, finalising her Master's Thesis on adaptive agricultural water management.

Interested in hydrological modelling, sustainability and data analytics

Plus our other professors, university lecturers and teaching staff

→ You'll meet them during WAT Course

GROUPS!

FIRST: How many we are?

→ Do you know of someone missing still?

THEN: Do you have a group?

→ If you don't find yourself in any of these groups, join one!

→ BUT: each group must have min. 5 and max. 6 members

Valtteri?
Olesia?
Camille?
Others?

Group 1	**Group 2**	**Group 3**	**Group 4**	**Group 5**	**Group 6**
Albert	Aarni	Anna	Antti	Lauri	Enni
Eero	Best	Frida	Ella	Markus	Kaisa
Essi	Iiris	Nasti	Sofia	Tetiana	Pihla
Nino	Stefano	Silja	Sonja	Ville	Tiia
Reeta	Tuomas	Veera	Zoé		Wenli
Saana(?)			Yingxin		

YOU SAY WAT?

How would you define Water & Environmental Engineering with just one sentence?

1) Think first alone, write key things down

→ *Themes, methods, aims?*

2) Discuss your definition with a pair

3) Write your joint definition to presemo.aalto.fi/wat

Prepare to explain your definition to everyone!

YOU SAY WAT?

So what is Water & Environmental Engineering?

SOME KEY ELEMENTS AND THEIR EXAMPLES

CONTEXT	THEMES	APPROACH	AIM
“globe”	“sustainability”	“planning and management”	“Making the world work”
“city”	“water supply”	“problem-solving”	“Ensuring sustainable and functioning society”
“agriculture”	“natural resources”	“computational methods”	
	“surface waters”	“together”	

YOUR EXPERTISE

- You are a diverse set of students, with varying backgrounds and existing expertise

  → As discussed last week: see group posters ☺

- It is really nice!

  → Provides opportunities for co-learning + linking our teaching your existing experience

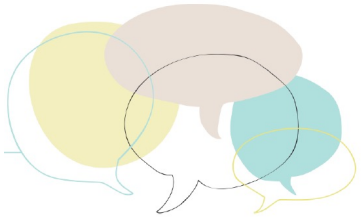
  → Also means that we are not so much teachers, but facilitators of your joint learning process

Note: do not use this as a short cut in your assignments!

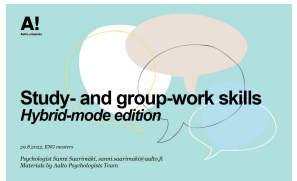
→ If you e.g. have a GIS wizard in your group, don't let her to do your GIS task, but use her as a mentor!

BE ACTIVE!

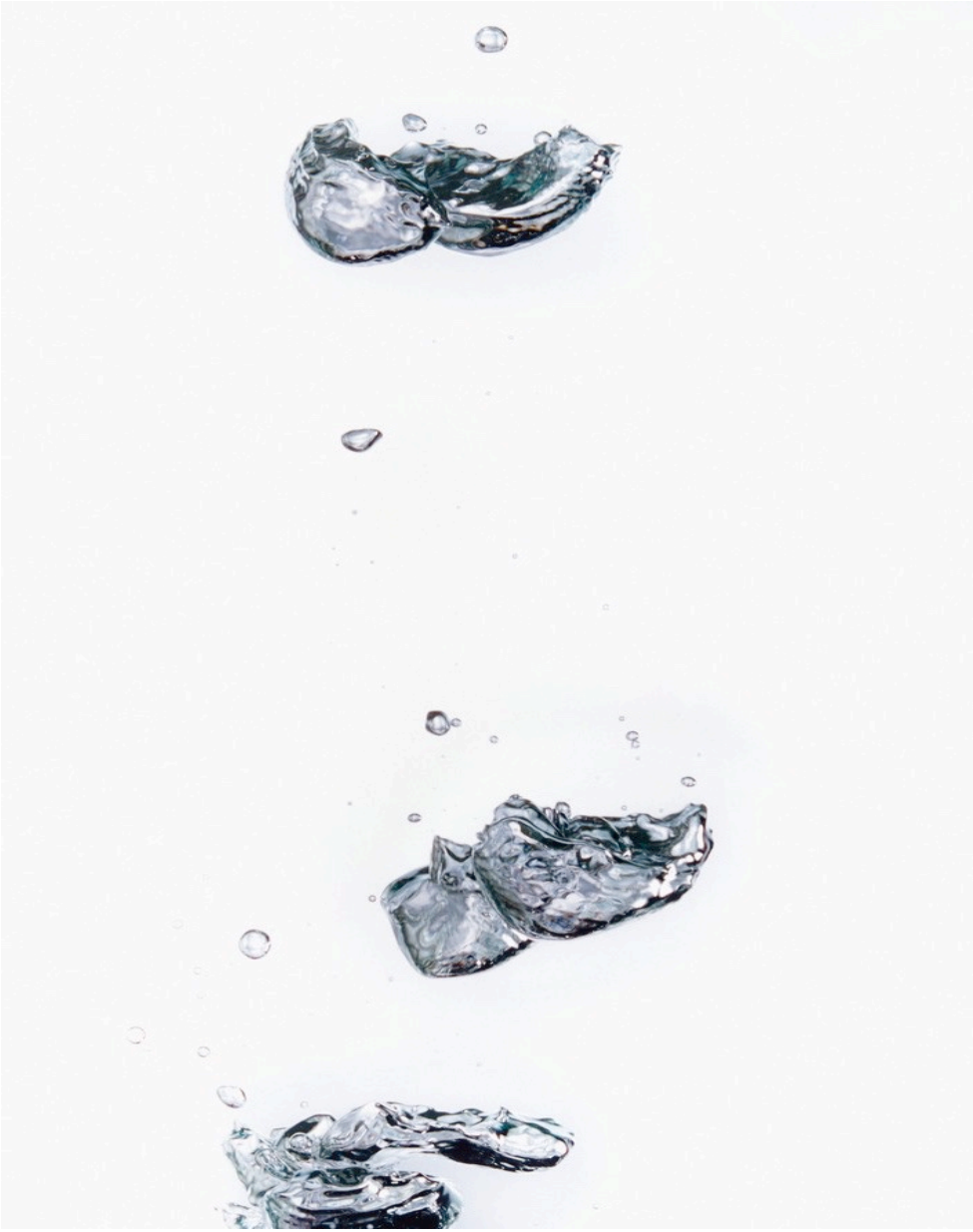
- Learn from each other
  - → As we cannot teach you as one uniform group, you must also learn from each other (so plenty of group work coming)
- …think wisely about your group work
  - → Your expertise should NOT mean that everyone does what they already know in the group (as no-one learns then)
  - → Rather: do what you don't know so well yet – and use your group members as your mentors to learn it!
- …and let us know of your expertise, too!
  - → Tell us already beforehand if you are expert on some of the themes or methods we teach

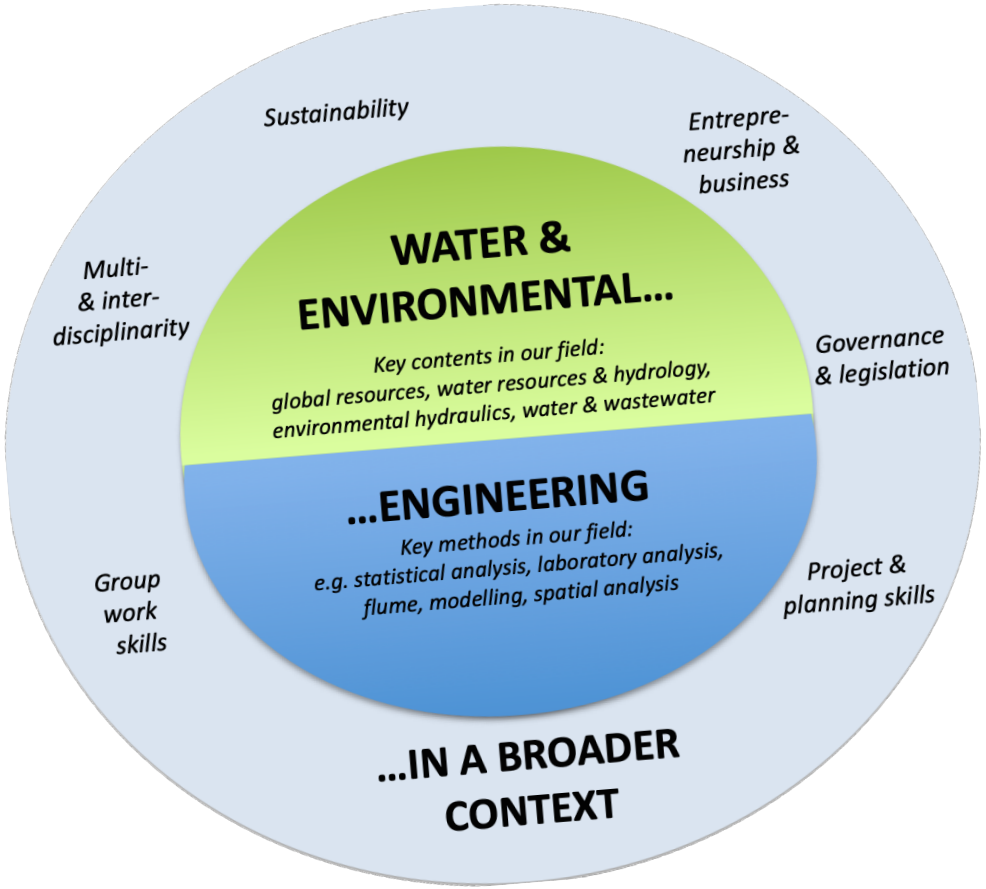


"Building knowledge is a shared process"



Questions, comments?





Note: lot of information, so please return to these slides also later on through MyCourses

WAT Course introduction

First something about WAT Course and WAT more generally (re-cap from WAT Orientation Days)

Three Elements of WAT course

- The 3 themes of WAT Course form the basics of WAT

  'WATER & ENVIRONMENTAL' (our key themes)

  '…ENGINEERING' (our key methods)

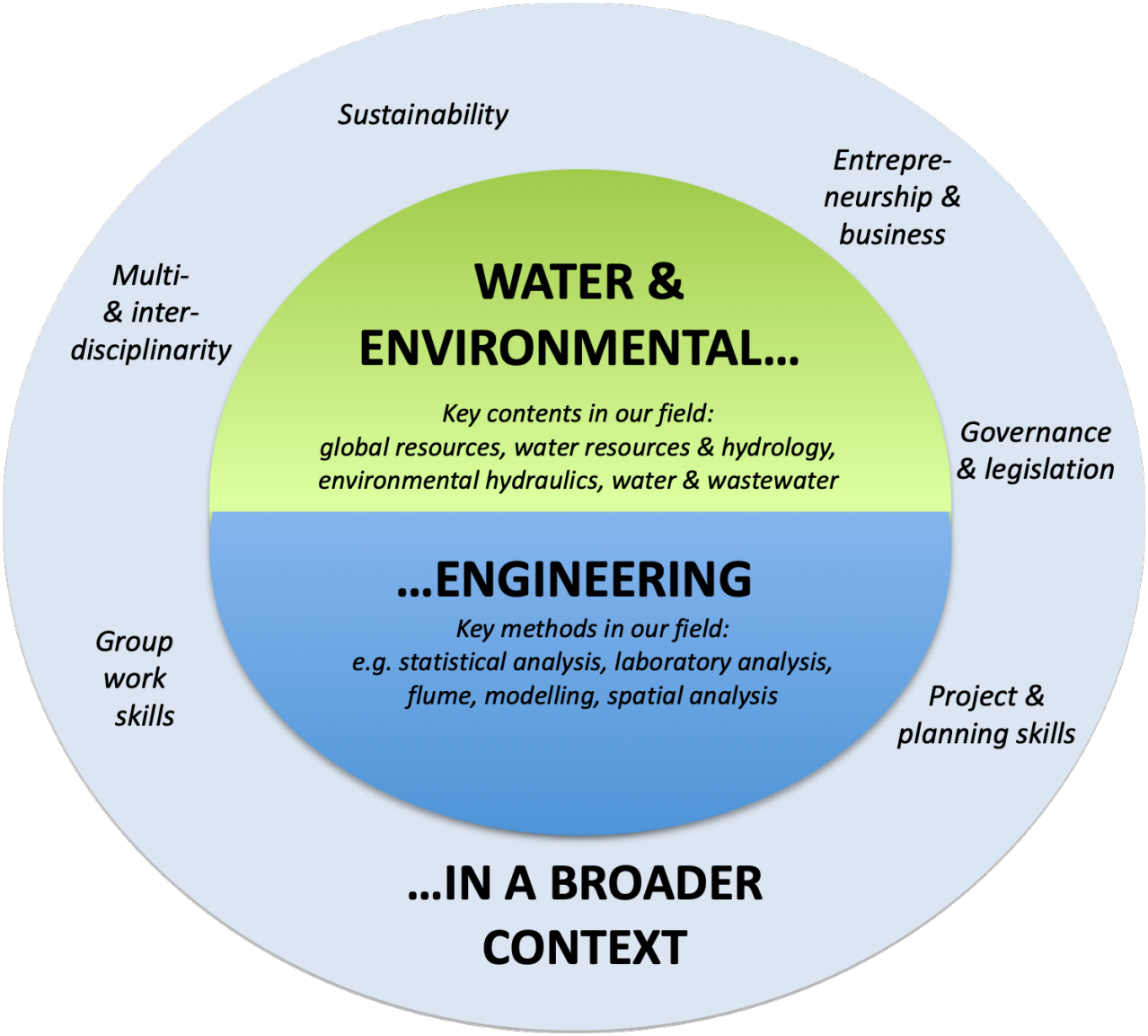
  '…IN A BROADER CONTEXT' (our context)

- You have to get our themes and methods right to be a water & environmental engineer

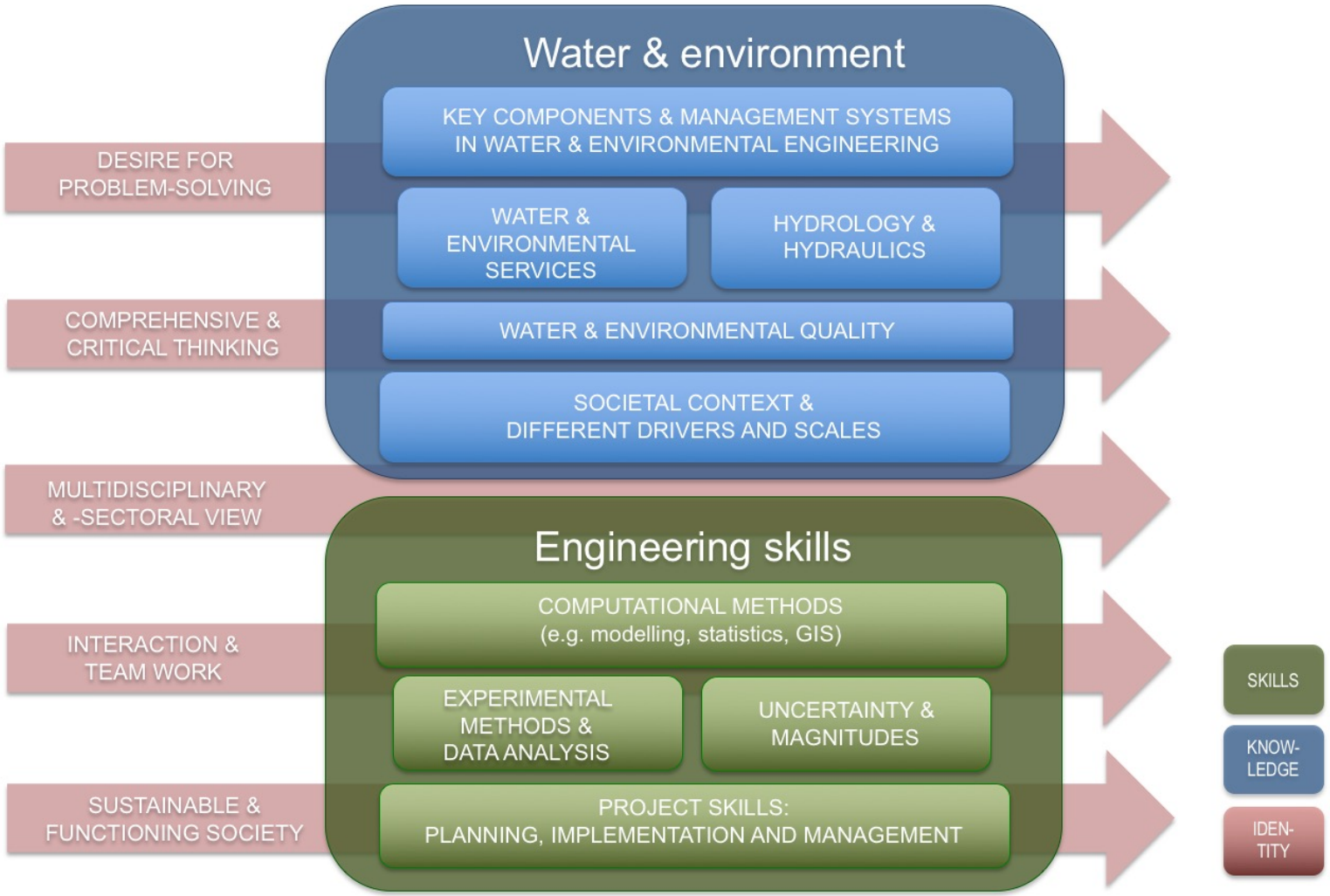
  → But to be able to do your work well, you need also to understand the broader context

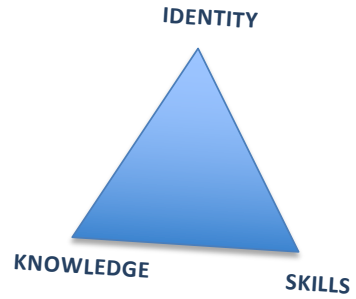
  → Our advanced courses focus on our themes and methods; in-depth expertise on context you have to get elsewhere

WAT Course provides an in-depth introduction to water and environmental engineering + its context



WAT COMPETENCES





WAT Course provides you an introduction on all of these: advanced courses provide then more in-depth expertise on your preferred themes and methods

Intended Learning Outcomes ILOs

Check these from SISU / MyCourses' Syllabus: gives you an idea what the course is about + also is our quality promise to you

After the completion of the course the student is able to…

- Recognise and describe the main characteristics of the water and environmental engineering field, including its link to sustainability [knowledge]
- Understand the principles of the hydrological cycle and water resources management, including the role of hydraulic structures [knowledge]
- Understand the key principles of good environmental and water quality [knowledge]
- Define the main aspects of water and environmental services and related infrastructures, particularly those related to water supply and sewerage systems [knowledge]
- Identify the broader societal context relevant to water and environmental engineering, including the key governance and entrepreneurial aspects [knowledge]
- Create his/her Personal Learning Portfolio, and in this way is able to recognise, assess and communicate his/her own key competences and strengths [identity]
- Work interactively as part of the group, with relevant communication and group working skills [identity]

Intended Learning Outcomes ILOs

Check these from SISU / MyCourses' Syllabus: gives you an idea what the course is about + also is our quality promise to you

In addition, the student:

- knows the key computational methods related to water and environmental engineering [knowledge]
- can apply basic water and environmental measurement methods and related basic analyses in the laboratory and in the flume [skill]
- understands the basic concepts of storing and processing spatial data in GIS [knowledge]
- knows how linear regression and statistical testing can be applied in water and environmental engineering related problems [knowledge]
- is able to quantify errors associated with hydro-environmental measurements [skill]
- understands basic concepts of applying simulation models to problems related to water and environmental engineering [knowledge]
- is aware of the potential of using computational methods in solving water and environmental problems [identity]

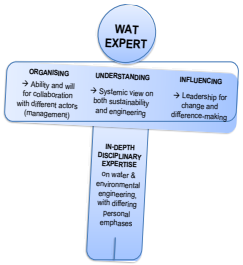
Your combined competence profile

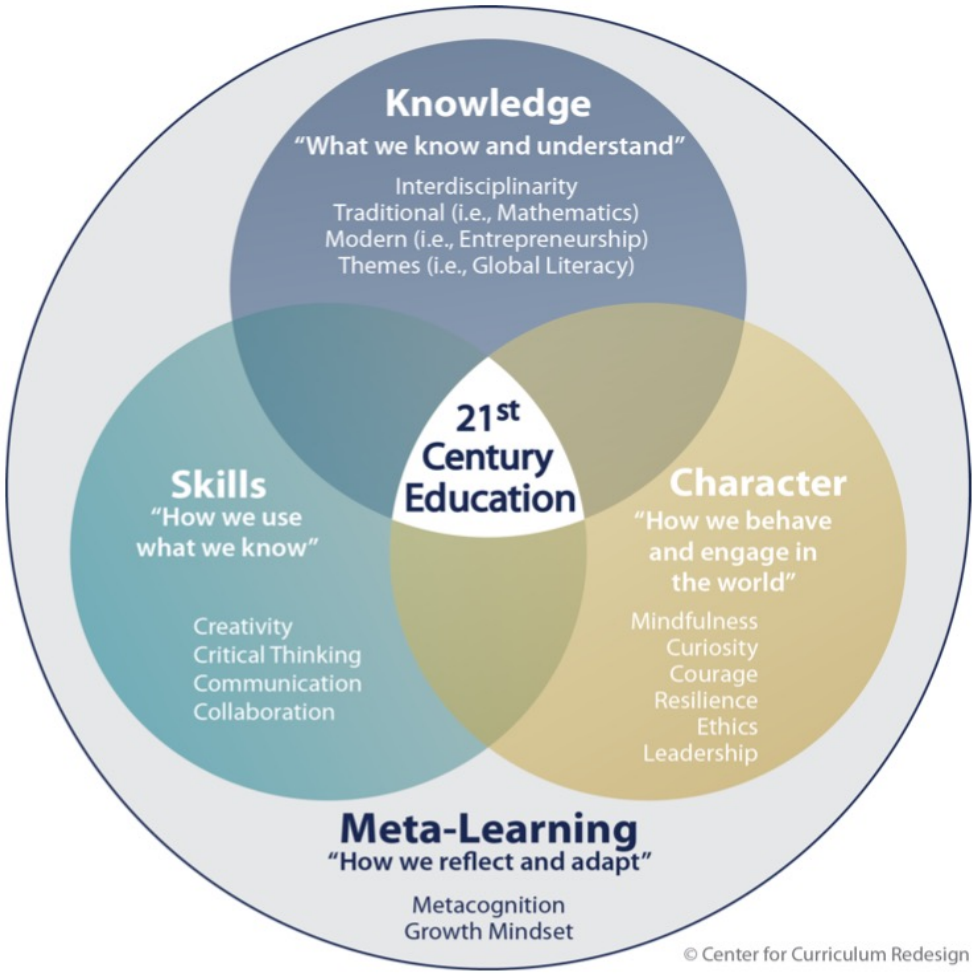
The course ILOs link to your competence-building

→ A combination of knowledge, skills and identity skills (’character’)

→ T-shaped learning profile as an aim

(see WAT orientation)





Source: Fadel, Bialik & Trilling 2015

WAT COMMON + ADVANCED COURSES

15 ECTS

WAT Course (WAT-E1100)

Provides you wide view on our field, not so much depth: general introduction

45 ECTS

- WATER RESOURCES MANAGEMENT & ENV. HYDRAULICS
- WATER & DEVELOPMENT
- WATER & WASTE WATER ENGINEERING

Advanced courses are organised according to three study themes / paths:
provide you with a more detailed expertise on your selected themes and methods

Note: while the three study themes differ, the methods and tools taught in different courses are useful across all three themes!

Three themes but also two general advanced courses:

- WAT Project Course
- WAT Special Course

WATER RESOURCES

- Groundwater hydrology
- Environmental hydraulics
- Hydrological modelling
- Surface water resources

WATER & DEVELOPMENT

- Sustainable built environment
- Sustainable Global Technologies SGT Studio (10 ECTS)
- Water and governance
- Water and people in a changing world

- WAT Project Course
- WAT Special Course

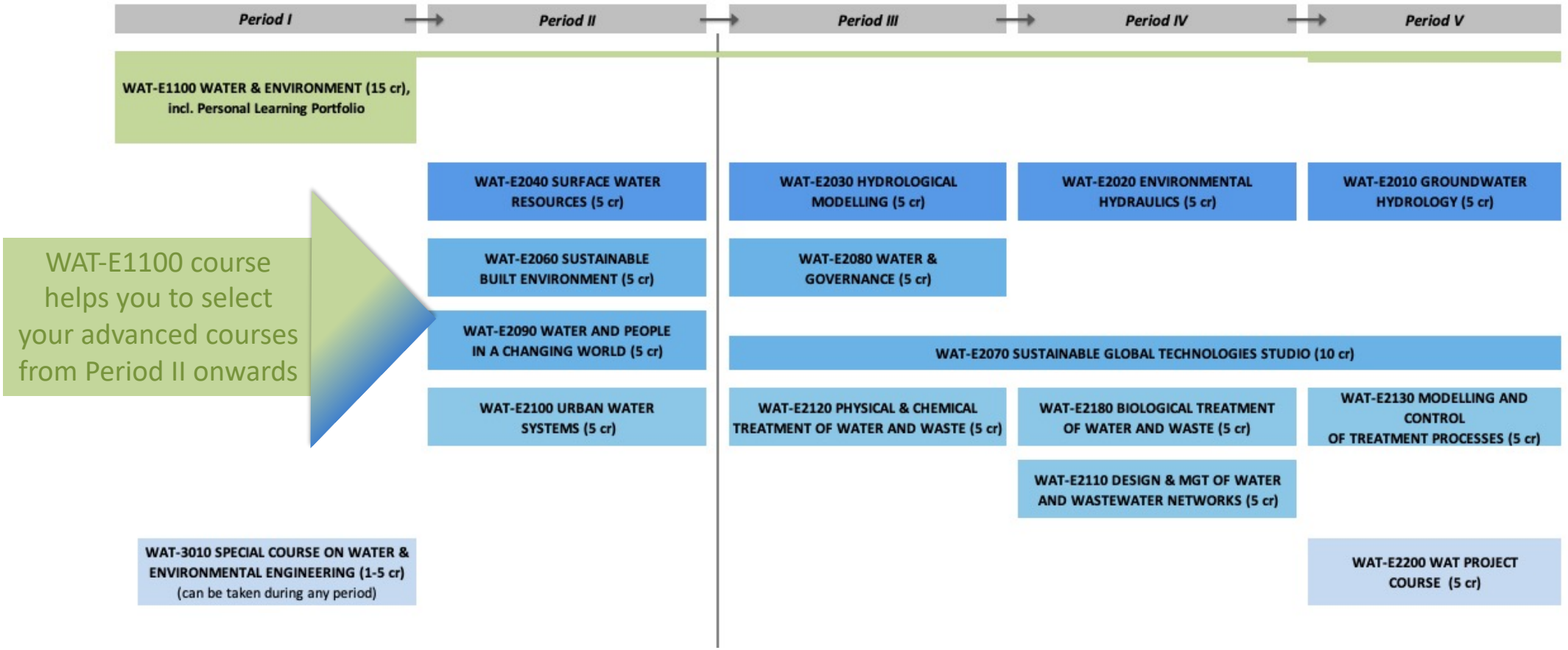
WATER & WASTEWATER

- Urban water systems
- Design and management of water and wastewater networks
- Physical and chemical treatment of water and waste
- Modelling and control of treatment processes
- Biological treatment of water and waste

Water & environmental engineering (15 cr.)

In-depth introduction to the key themes and problem-solving methods in our field, through variety of group work and individual tasks.

WAT COMMON & ADVANCED COURSES



WAT Course introduction

Then to the actual WAT Course practicalities ☺

WAT COURSE: WEEKLY STRUCTURE…

WAT Course themes tied together with a common weekly structure (that change a bit each week as every week is different)

General weekly structure

	Mon	Tue	Wed	Thu	Fri
Morning (9.00-)	CONTEXT SESSION	CONTACT SESSION/ GROUP WORK	THEMATIC TASK: individual / group work	WEEKLY EXERCISE	WEEKLY EXERCISE: Individual / group work
Afternoon (-4pm)	CONTACT SESSION	THEMATIC TASK	THEMATIC TASK: individual / group work	WEEKLY EXERCISE: Individual / group work	WEEKLY EXERCISE

Draft showing the overall schedule – not all weeks → e.g. some weeks weekly method comes earlier

Timetable for each week can be found from WAT-E1100 MyCourses: check them out!

...WITH WEEKLY THEMES

WEEKLY THEMES

1) Global natural resources MATTI & OLLI
2) Water resources management & hydrology HARRI
3) Environmental hydraulics JUHA
4) Water & wastewater engineering ANNA
5) Environmental mgt and sustainability MEERI
6) Water and environmental quality RIKU
7) Synthesis MARKO

WEEKLY METHODS

1) Statistical analysis
2) Simulation modelling
3) Hydraulic flume: measurement & uncertainty
4) Spatial analysis
5) Life Cycle Assessment LCA
6) Laboratory analysis

WAT CONTEXTS

- Team roles & group work (Week 1)
- Entrepreneurship & business (Week 4)
- Governance & science (Week 7)

Weekly timetable for WAT-E1100 course available in MyCourses under 'Course structure and practicalities' sub-page *(note: update on 2.9.2022 for laboratory groups)*

→ But remember to check the weekly sub-page for final, detailed timetable

WAT course: weekly timetable

Version 30.8.2022

WHAT? Weekly timetable for the common course of WAT Master's Programme. Large part of learning activities are done in groups: students are divided into the groups at the beginning of the course.

WAT COURSE? WAT-E1100 is a 15-credit course. It introduces the key themes and broader context related to water and environmental engineering, and focuses also on the key computational methods and problem-solving approaches related to water and environmental engineering.

ASSIGNMENTS? WAT Course includes Contact Sessions as well as two types of assignments: **Tasks** are related to the key themes and broader context, and **Weekly Exercises** to the methods and problem-solving approaches. Tasks are mainly done in groups or pairs, while Weekly Exercises are usually done individually.

WEEKLY TIMETABLE: WAT-E1100 Water and Environmental Engineering

1st WEEK — Global natural resources (Matti, Olli, Matleena) + Intro (Marko)

	Mon 5.9.	Tue 6.9	Wed 7.9	Thu 8.9	Fri 9.9
Morning (9.00-)	CONTEXT SESSION: Intro + group work practices [Marko]	CONTACT SESSION: sustainability, global resources + SGT cases [Olli & co]	THEMATIC TASK: individual / group work	WEEKLY EXERCISE: statistical analysis	WEEKLY EXERCISE: individual / group work
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	CONTACT SESSION: global water issues [Matti]	CONTACT SESSION: sustainability, global resources + SGT cases [Olli & co]	THEMATIC TASK: SWOT wrap-up [Matti & co]	WEEKLY EXERCISE: individual / group work	WEEKLY EXERCISE: statistical analysis

2nd WEEK — Water resources management & hydrology (Harri & co)

	Mon 12.9.	Tue 13.9.	Wed 14.9.	Thu 15.9.	Fri 16.9.
Morning (9.00-)	CONTACT SESSION: water resources management & hydrology [Harri & co]	THEMATIC TASK: HBV modelling [Harri]	WEEKLY EXERCISE: modelling	WEEKLY EXERCISE: individual / group work	THEMATIC TASK: individual / group work
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	CONTACT SESSION: water resources management & hydrology [Harri & co]	THEMATIC TASK: individual / group work	WEEKLY EXERCISE: modelling	WEEKLY EXERCISE: modelling	THEMATIC TASK: HBV wrap-up [Harri]

3rd WEEK — Environmental hydraulics (Juha)

	Mon 19.9.	Tue 20.9.	Wed 21.9.	Thu 22.9.	Fri 23.9.
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Morning (9.00-)	CONTACT SESSION: Environmental hydraulics & hydro-environmental engineering solutions [Juha]	Flume group 1 @ 9:00-10:00 Flume group 2 @ 10:30-11:30 Flume group 3 @ 13:00-14:00	Flume group 4 @ 9:00-10:00 Flume group 5 @ 10:30-11:30 Flume group 6 @ 13:00-14:00	Online helpdesk 10:00-12:00 for flume assignment (optional attendance) Individual / group work	CONTACT SESSION: flume assignment wrap-up
Afternoon (-4pm)	CONTACT SESSION: Experimental methods and data analyses; intro to flume assignment	When your group is not attending a teaching session, you should work independently	When your group is not attending a teaching session, you should work independently		CONTACT SESSION: scientific communication task

4th WEEK — Water & wastewater engineering (Anna)

	Mon 26.9.	Tue 27.9.	Wed 28.9.	Thu 29.9.	Fri 30.9.
Morning (9.00-)	CONTACT SESSION: water & wastewater engineering [Anna]	CONTEXT SESSION + TASK: ENTREPRENEURSHIP by Aalto Ventures Programme AVP	WEEKLY EXERCISE: spatial analysis & GIS	WEEKLY EXERCISE: individual / group work	THEMATIC TASK on ENTREPRENEURSHIP: pitch clinic
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	CONTACT SESSION: water and wastewater engineering [Harri M.] + GIS intro [Teemu]	THEMATIC TASK on ENTREPRENEURSHIP: group work / interviews	ENTREPRENEURSHIP SESSION by AVP	ENTREPRENEURSHIP: introduction to pitching	ENTREPRENEURSHIP PRESENTATIONS + WRAP-UP with AVP

5th WEEK — Environmental management (Meeri)

	Mon 3.10.	Tue 4.10.	Wed 5.10.	Thu 6.10.	Fri 7.10.
Morning (9.00-)	WEEKLY EXERCISE: Life Cycle Assessment	WEEKLY EXERCISE: individual / group work	WEEKLY EXERCISE WRAP-UP	THEMATIC TASK: individual / group work	CONTACT SESSION: Dilemma board game [Meeri]
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (9.00-)	WEEKLY EXERCISE: individual / group work	WEEKLY EXERCISE: individual / group work	CONTACT SESSION: environmental and sustainability management [Meeri]	THEMATIC TASK: individual / group work	THEMATIC TASK: wrap-up [Meeri]

6th WEEK — Water & environmental quality (Riku)

	Mon 10.10.	Tue 11.10.	Wed 12.10.	Thu 13.10.	Fri 14.10.
Morning (9.00-)	CONTACT SESSION + TASK: water & enviromental quality [Riku & co]	WEEKLY EXERCISE: introduction to laboratory work	*Starting at 8.00* WEEKLY EXERCISE: laboratory work & analysis *(Groups 3-5)*	*Starting at 8.00* WEEKLY EXERCISE: laboratory work & analysis *(Groups 1-2)*	WEEKLY EXERCISE time to prepare the presentations
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	Time to read for the home exam: individual work	WEEKLY EXERCISE: laboratory work & analysis *(Group 6)*	WEEKLY EXERCISE: laboratory work & analysis *(Groups 3-5)*	WEEKLY EXERCISE: laboratory work & analysis *(Groups 1-2)*	TASK & WEEKLY EXERCISE WRAP-UP

7th WEEK — Synthesis (Marko)

	Mon 17.10.	Tue 18.10.	Wed 19.10.	Thu 20.10.	Fri 21.10.
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Morning (9.00-)	TIME FOR FINALISING YOUR ASSIGNMENTS	CONTEXT SESSION: Science + Governance & legislation [Marko]	SYNTHESIS DAY: presenting & synthesising the key themes and learning outcomes of WAT Course [Meeri & Marko]	REFLECTION & FEEDBACK DAY [Marko] LUNCH TOGETHER!	PHEEW, FREE TIME FROM WAT COURSE!
Afternoon (-4pm)		SYNTHESIS WORK: Instructions + individual synthesis		Individual work on your portfolio + mentor meetings	*(possibility for mentor meetings + planning your studies and preparing your Personal Learning Portfolio)*

WEEKLY THEMES

1) Global natural resources MATTI & OLLI
2) Water resources management & hydrology HARRI
3) Environmental hydraulics JUHA
4) Water & wastewater engineering ANNA
5) Environmental mgt and sustainability MEERI
6) Water and environmental quality RIKU
7) Synthesis MARKO

WEEKLY METHODS

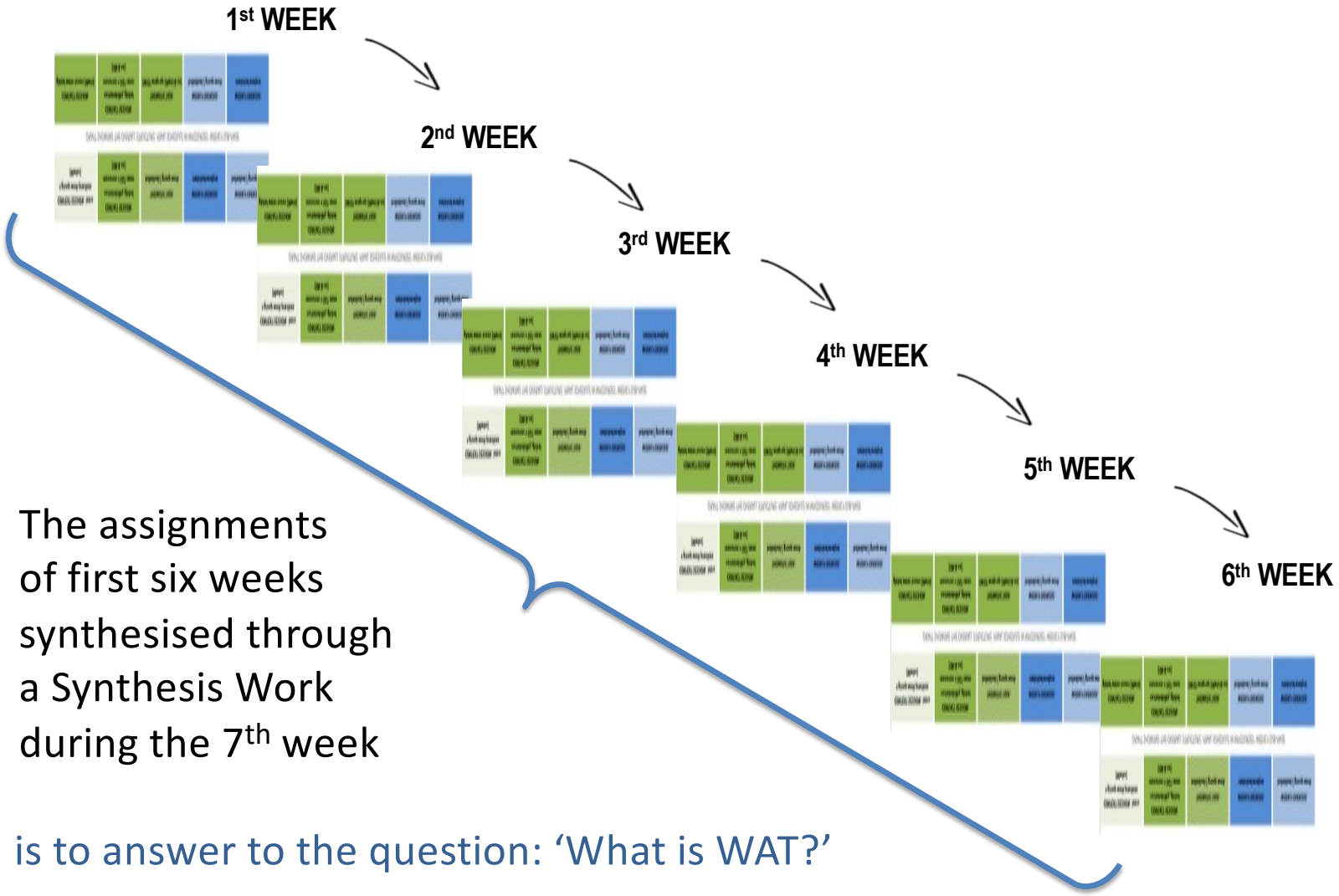
1) Statistical analysis
2) Simulation modelling
3) Hydraulic flume: measurement & uncertainty
4) Spatial analysis
5) Life Cycle Assessment LCA
6) Laboratory analysis

WAT CONTEXTS

- Team roles & group work (Week 1)
- Entrepreneurship & business (Week 4)
- Governance & legislation + science (Week 7)

LEGEND FOR COLOURS

WATER & ENVIRONMENT: session on context	WATER & ENVIRONMENT: session on weekly theme	WATER & ENVIRONMENT: individual / group work	COMPUTATIONAL METHODS: session on weekly method	COMPUTATIONAL METHODS: individual / group work



The assignments of first six weeks synthesised through a Synthesis Work during the 7th week

→ Aim is to answer to the question: 'What is WAT?'

→ Links to your study plan and portfolio process

COURSE MANAGEMENT + TEACHERS

- WAT Course responsible teacher is Marko,
  with Teemu having the main responsibility for methods part
- Course assistant Kielo responsible for practical arrangements

→ Each week has also Weekly Leader(s) who are responsible for weekly tasks and exercises + actual teaching:
Weekly Leaders can be seen above under Weekly themes

1) Global natural resources MATTI & OLLI
2) Water resources management & hydrology HARRI
3) Environmental hydraulics JUHA

4) Water & wastewater engineering ANNA
5) Environmental mgt and sustainability MEERI
6) Water and environmental quality RIKU
7) Synthesis MARKO

COURSE PRACTICALITIES

- The course is organised live in Water Building and other locations

  → Group work sessions you can naturally agree as you see best (live/online)

- Key online platforms: MyCourses + Teams
  - **MyCourses:** all information about the weeks, including sessions locations + lecture material, assignments as well as submissions

    → Also official announcement: follow carefully!

  - **Teams:** communication channel for e.g. questions regarding the assignments: use weekly sub-channels!

    → Also possible session recordings there

Are you already in MyCourses?

Are you already in Teams
→ Instructions in MyCourses ☺

SESSION RECORDINGS

- The sessions build on active interaction with you. Many sessions also combine lectures with (group) learning activities.
- It is thus generally **not** possible to attend the sessions remotely

→ But if you are absent e.g. due to sickness, let us know as soon as possible and we will see what we can do (e.g. a compensatory task)

→ Also, we aim to provide session recordings for the key sessions such as those introducing assignments: will become visible in the course's Teams channel under that week (and may also be streamed live)

COURSE ASSIGNMENTS

- Each week includes two assignments
  1) Thematic Task: mainly done in groups
  2) Weekly Exercise: individually or in groups/pairs
  → Some weeks include also a small Context Task

Laboratory safety exam for Weeks 3 & 6: DL for the exam is on Sun 18.9.

The groups have a rotating *Weekly Chair*

- Responsible for chairing your meetings and being contact point for teachers

- Also responsible –together with the group– for submitting group assignments

→ The group decides themselves the Weekly Chairs:
everyone should be a chair at least once!

LATE SUBMISSIONS

- The general practice: submit your tasks on time, by the given deadline (naturally)
- You are able to submit late, but this will automatically result in -**30% of the grade** of that particular assignment
- Note that even then you must submit the assignment **within a week from the deadline**

Note: we have a similar practice also in our WAT advanced courses, with slight differences between the courses

In possible *force majeure* situation, please contact the teacher who is responsible for the assignment and we'll figure things out!

COURSE ASSESSMENT

The course is assessed in three parts:

Assessment done by teachers

1. Grade for Thematic tasks: 0…5
2. Grade for Weekly exercises = 0…5

Some tasks and exercises may be assessed with pass/fail

Assessment done by you

3. Grade from Self & Peer Assessment = 0…5

→ As you to work plenty in groups, also assessment done partly by yourselves

Final grade = average of the three grades

SELF + PEER ASSESSMENT

- You will assess yourself and your group members (peers) input for your group work activities during the course
  → A possibility to reflect your group work process
  → Also learning to give constructive feedback to your peers, and to receive it yourself ☺

- Will be done after the course through online questionnaire
  → Complemented by self-facilitated 'I like, I wish' exercise that we will do in groups during Synthesis Week

SELF + PEER ASSESSMENT

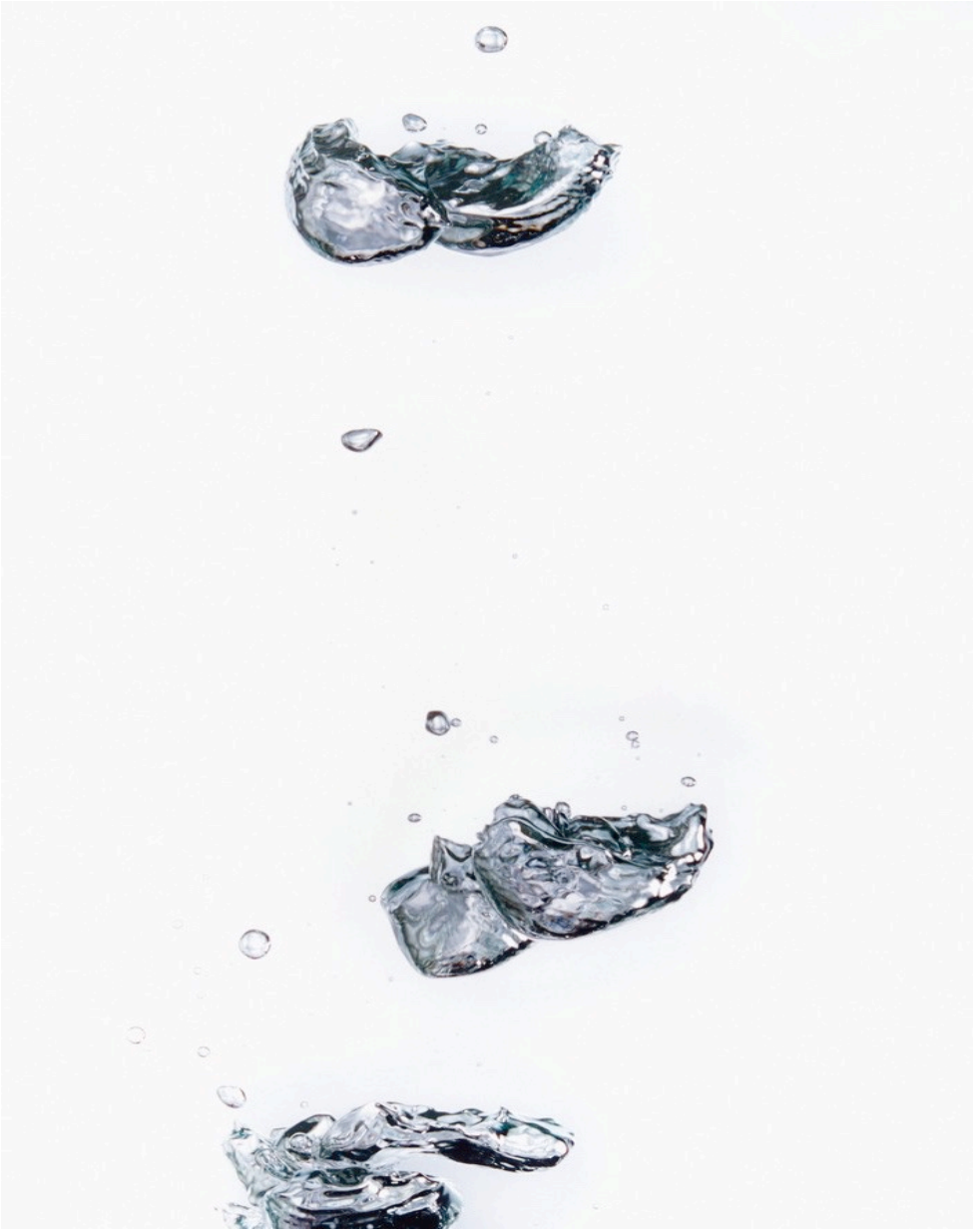
- Assessment done person by person (incl. yourself) for two indicators that have a similar weight:
  - **Content**: person's contribution to the content of the group work (knowledge, ideas, analysis etc.)
  - **Interaction**: person's contribution to the group and its functioning (interaction skills, including listening, leadership etc.)

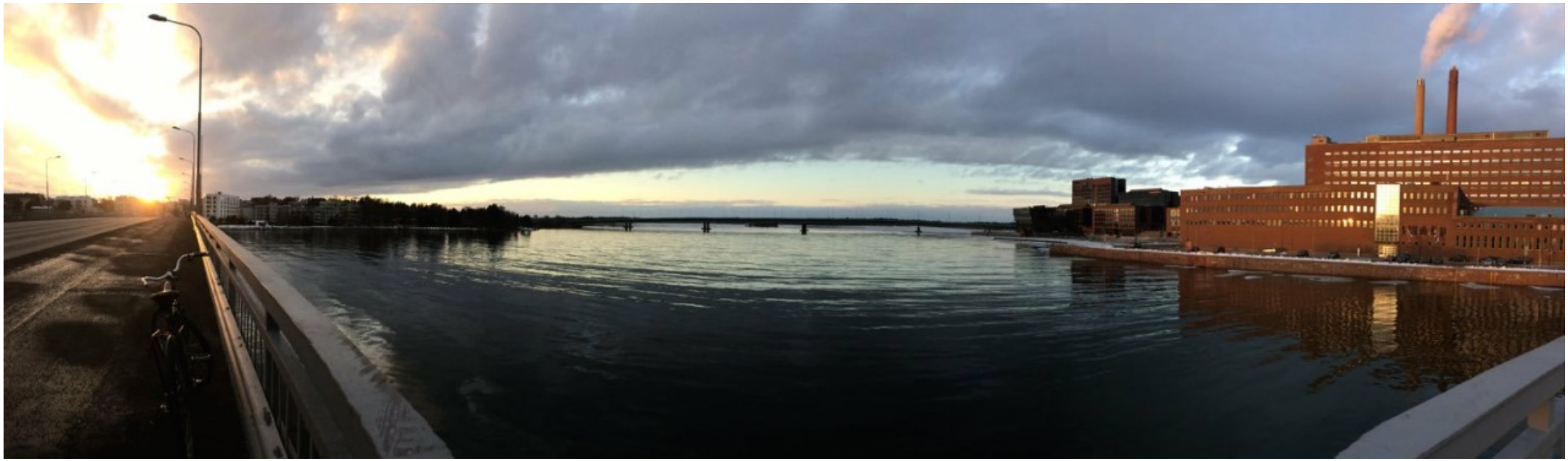
The grade is complemented by a short explanation for both grades: this is thus your possibility to provide anonymous feedback to the person.

COURSE FEEDBACK

- We have fine-tuned the concept based on last years' experiences and feedback
  - → We know it is hard work, but trying to improve it by e.g. clarifying the structure and increasing focus
  - → Yet, the concept means you will have several separate tasks, and that you'll learn many new things every week
- Your feedback is very valuable!
  - → Come to talk to us!
  - → Anonymous feedback box in MyCourses
  - → Course feedback questionnaire after the course

Questions, comments?





More information through MyCourses pages of WAT Course:
https://mycourses.aalto.fi/course/view.php?id=35667

Note: MyCourses has separate pages for each year, so check that you are viewing this year's course ☺

Essential elements

...for 'ensuring a functioning and sustainable society'

This is a reminder from last week's WAT Orientation

Essential elements

...for 'ensuring a functioning and sustainable society'

Three critical elements that you must comprehend to successfully pass WAT Course (and entire WAT): what they could be?

→Hint: all start with S!

- Sustainability (the aim & crosscutter)
- Society (the context)
- Systems (the way to think)

SUSTAINABILITY

Sustainability = a state of a **system** (where system maintains its critical functions under change)

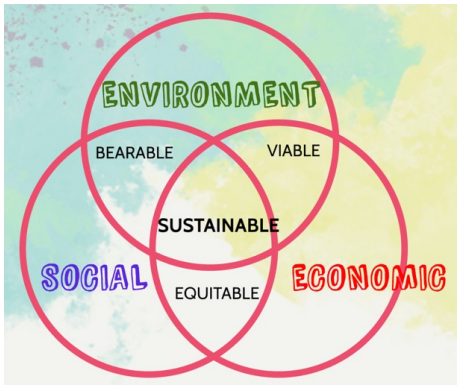
Sustainability is the ability of a human, natural or mixed system to withstand or adapt to endogenous or exogenous change indefinitely.

Sustainable development is therefore a pathway of deliberate change and improvement which maintains or enhances this attribute of the system, while answering the needs of the present population.

Dovers & Handmer 1992

”Sustainable development …
meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Our Common Future i.e. Brundtland Report 1997



SOCIETY

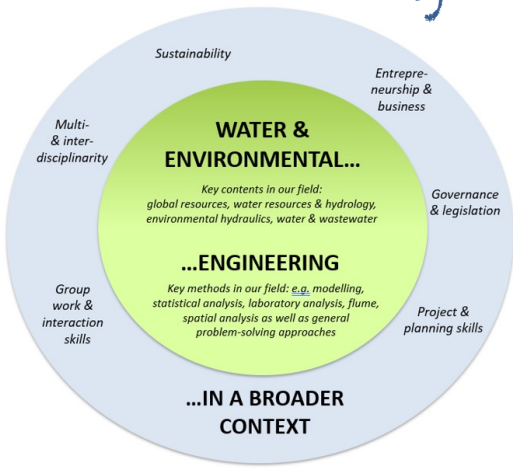
”A large group of people who live together in an organized way, making decisions about how to do things and sharing the work that needs to be done.”

Cambridge Dictionary

Society forms the main **system** for water and environmental engineering: we are at the society’s service!

→ Yet, society has different scales: sometimes it’s about a city, sometimes about a nation, sometimes about entire globe

…for ‘ensuring a functioning and sustainable society’



Light blue doughnut = society

SYSTEMS

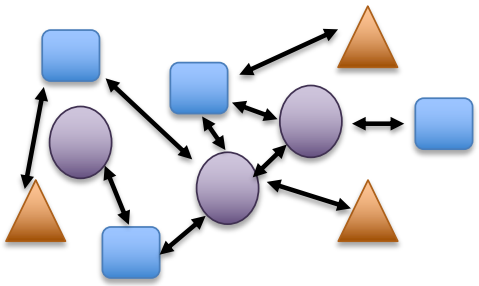
A system is a set of things – people, cells, molecules, or whatever – interconnected in such a way that they produce their own pattern of behavior over time.

Meadows, D.: Thinking in Systems, a Primer. 2008.

→ System includes but also excludes: **system boundaries** therefore very critical to understand and describe

Confusion and disagreement often because we talk about different systems (or their scales)

SYSTEM ELEMENTS + THEIR INTERACTION = SYSTEM'S PURPOSE

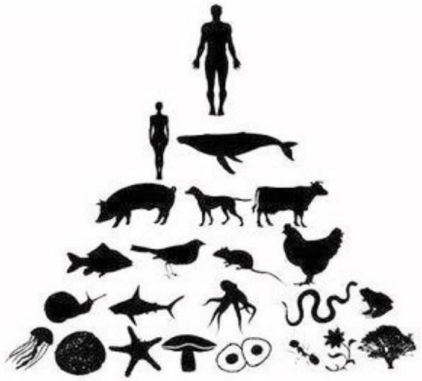


(e.g. functioning water supply, designing new area, national security, sustainability)

SYSTEMS

http://glancesideways.com/2012/10/progression-and-conceptual-adjustment/

Man at the top, world as a resource



The dominant culture of our time

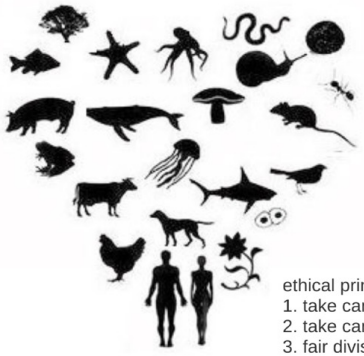
Food production: industrial scale, with aim to maximum economical profit

Complex, connected web of life - mutualism

Many indogenous cultures

Food production: interconnected web – energy and nutrition cycles

Regenerative worldview



ethical principles:
1. take care of the planet
2. take care of people
3. fair division of surplus

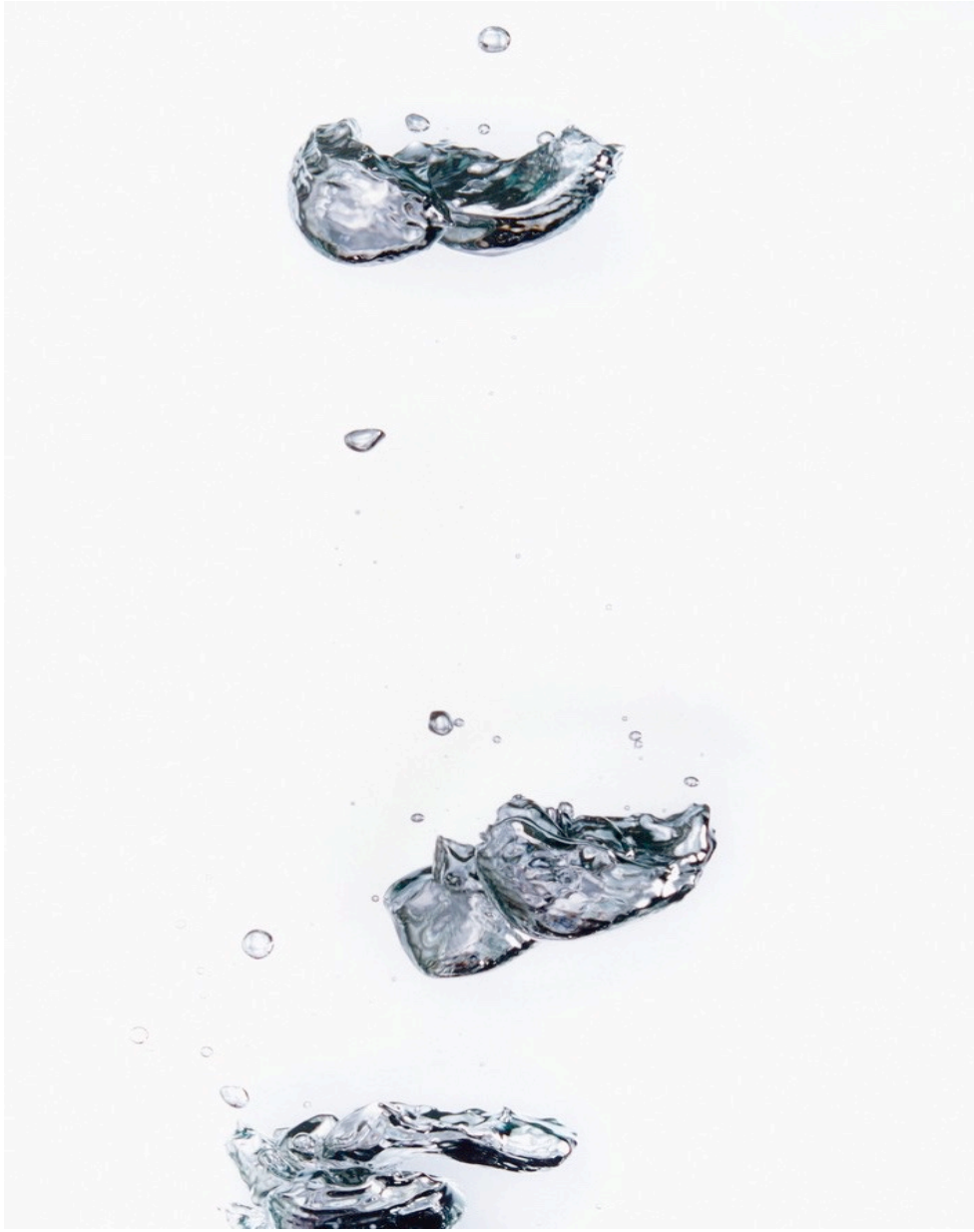
Regenerative design, e.g. Permaculture

Food production: while producing food for humans, we should heel damaged natural systems

Also differing views on how systems work and interact, and what is their purpose

Questions, comments?

Feew, lot of information - you need a BREAK!



AGENDA

9.00- Introductions: forming WAT Course groups

Introduction to WAT Course

WAT Essential elements

BREAK

~10.30- Session on team roles and group work

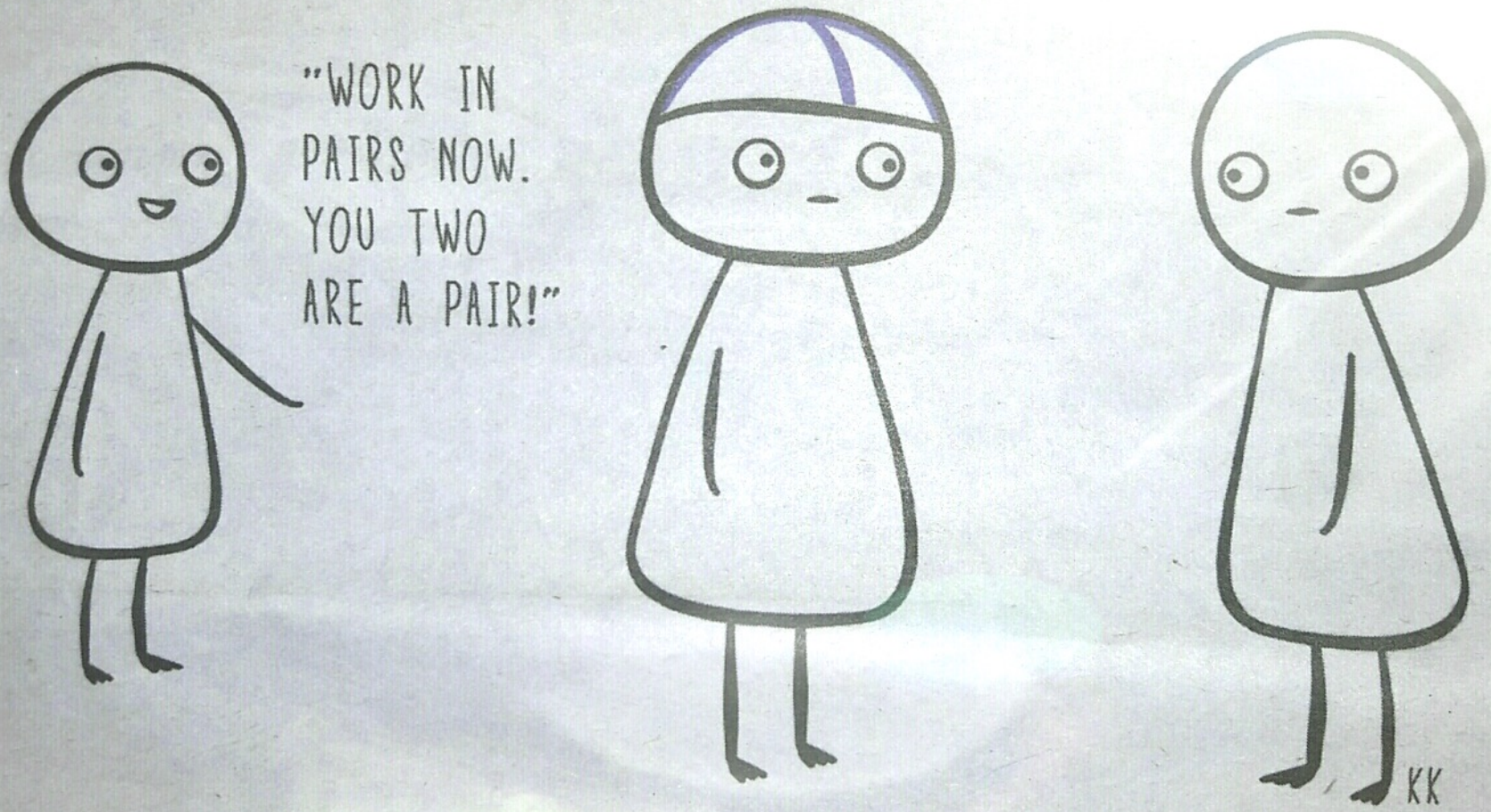
→ Different phases and roles in the group

→ Project & time management

→ *First group work task (submit to MyCourses):*
agree on your own Rules of Work for your group

Group work introduction

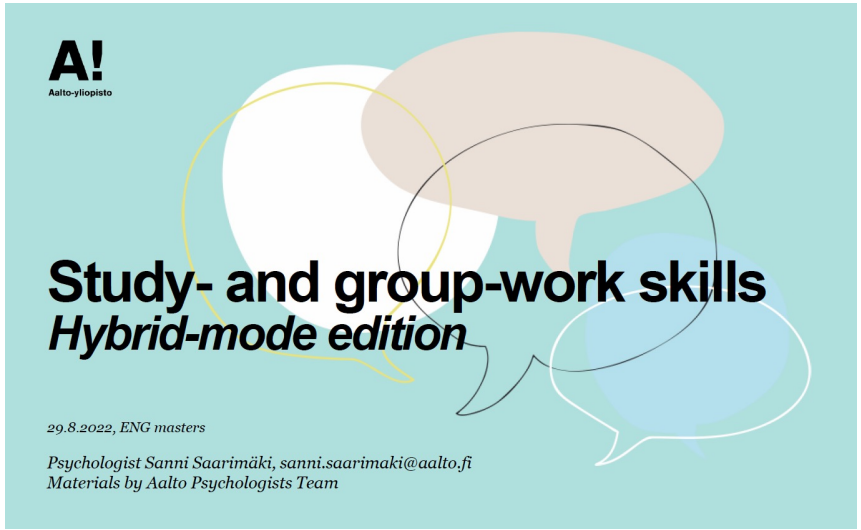
Karoliina Korhonen: Finnish Nightmares



YOU GET SOMEONE AS YOUR PAIR YOU DON'T KNOW.

ENG Orientation Week

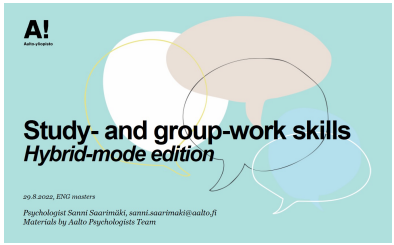
Useful presentations on e.g. scientific writing, intercultural communication, studying skills – and group work!
→ Check the presentations:
https://mycourses.aalto.fi/mod/folder/view.php?id=930751

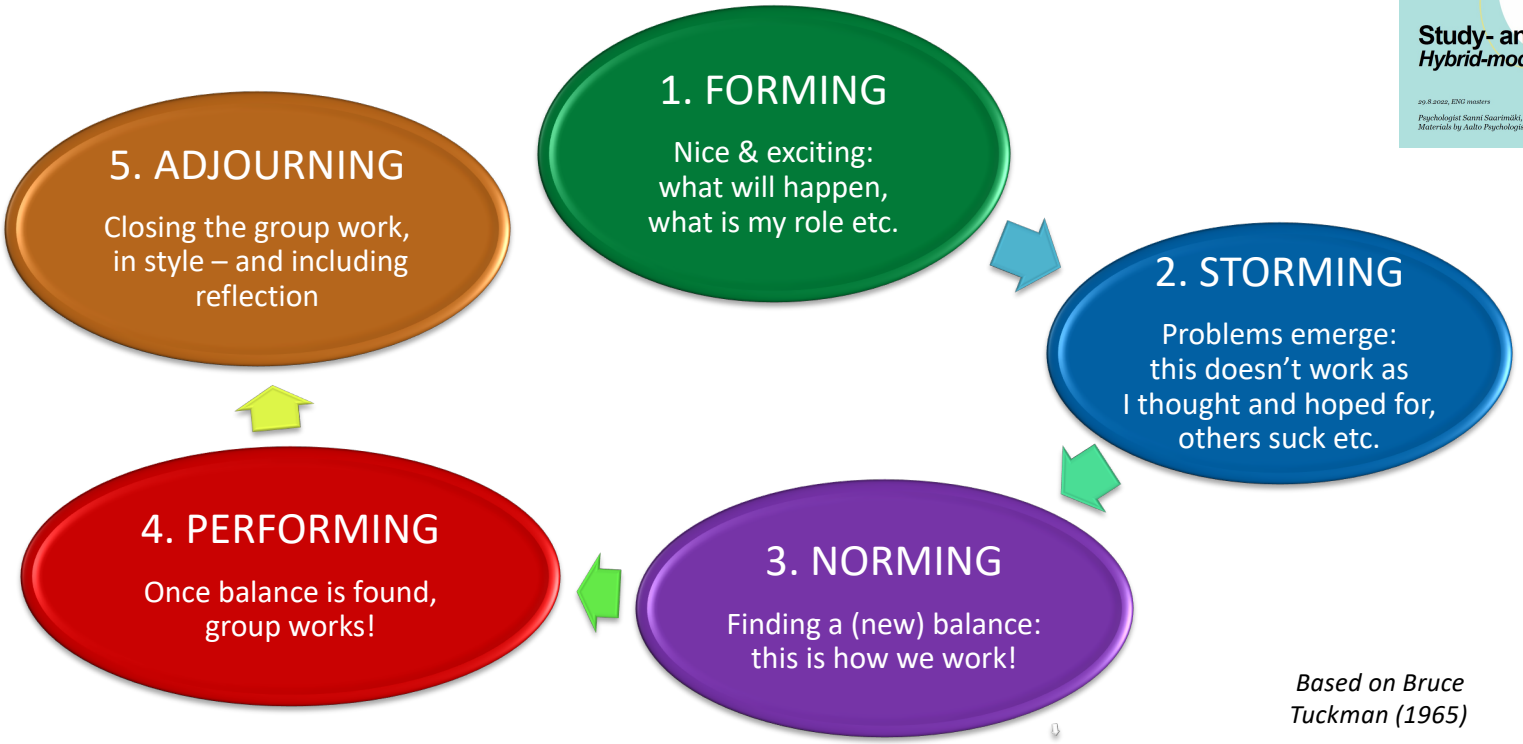


GROUP WORK

- Group working is fun! …and hard.
- Who knows the five common stages of group work?

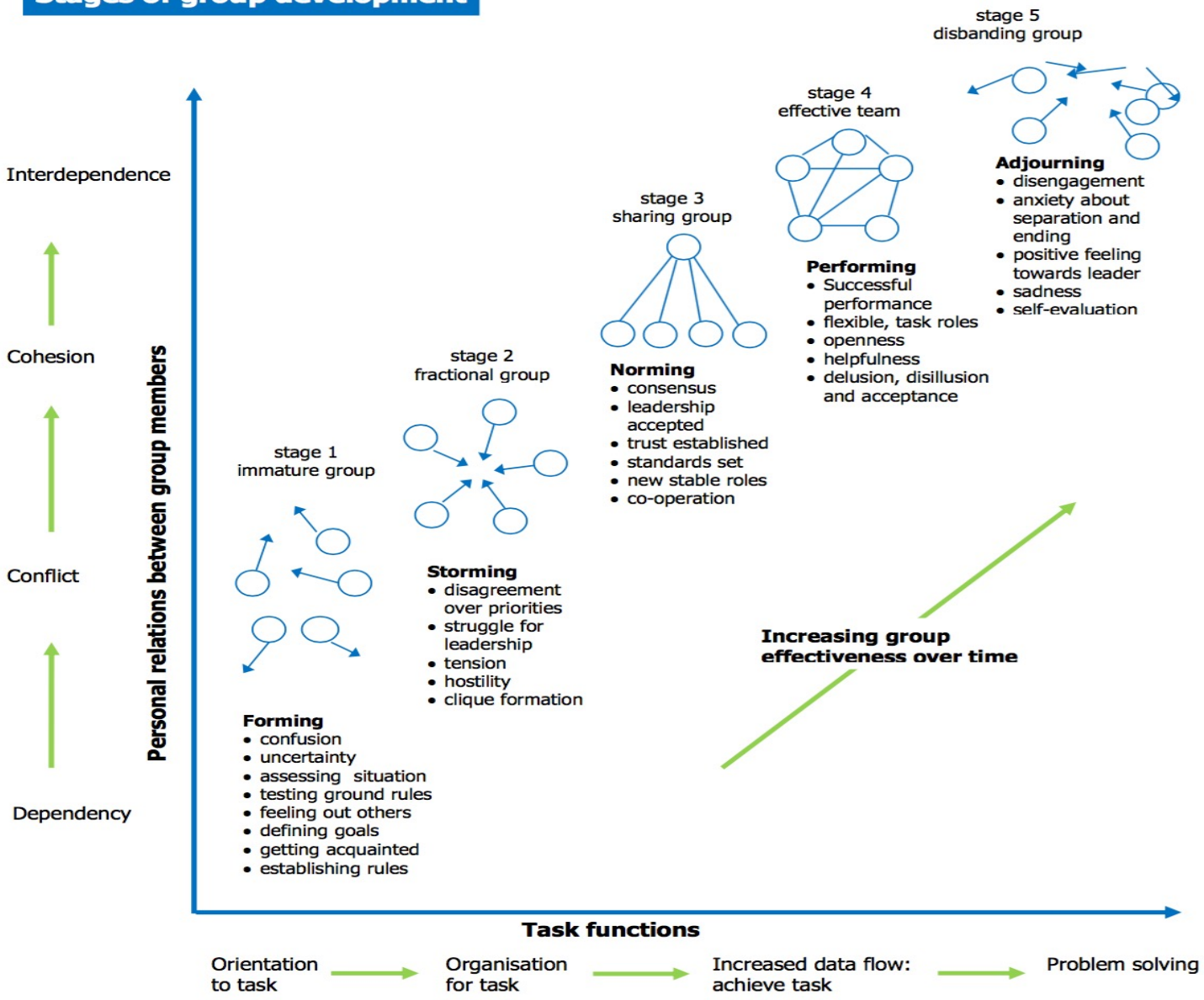
→ Be ready for storms, too: part of the learning process





Based on Bruce Tuckman (1965)

Stages of group development



OUR AIM:
TO GO THROUGH THIS ENTIRE PROCESS DURING NEXT 7 WEEKS

Source: Aurora / Tuckman
http://bit.ly/2cPGiFa

ROLES IN GROUP

- Group = a set of different people in different roles

  → Everyone takes and/or is given a certain role in a group

  → The roles can also change over time

- Roles that people take depend on many things

  - Your personal preferences:
    how you like to work, where you are good at
  - Your past experiences in a group
  - Group dynamics
  - Your ambition level for the group work:
    do I want to it very well, or just get it done?

ROLES IN GROUP

- Roles can be beneficial or harmful for the group work
  → In ideal situation different roles support each other
  → In practice, however, many groups have a set of roles that can together be less beneficial or even harmful for the work

- Very important to be aware of the roles that you and other group members have (particularly as a Chair)
  → Try only to take roles that:
    1) are beneficial for the group
    2) allow you to learn most from the group work
  → Also encourage your group members to do the same (you are hereby given the permission to note them if not)

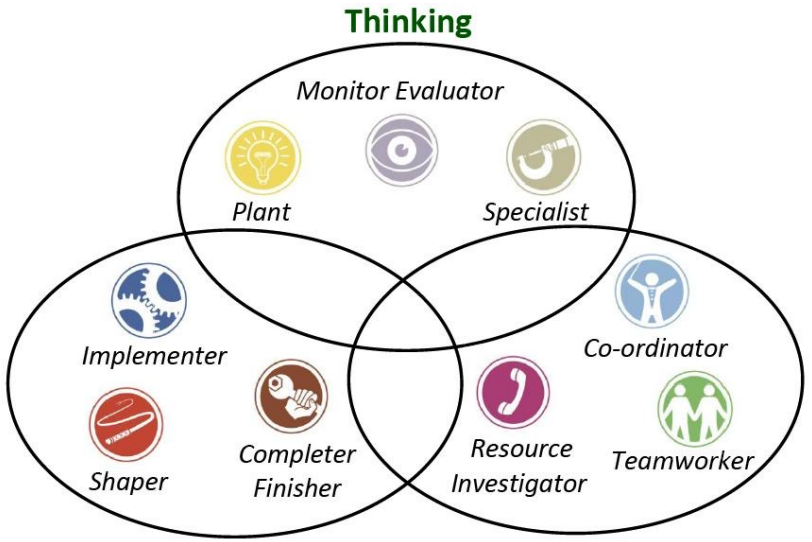
TEAM ROLES by Belbin

	Team role	Strengths	Allowable weaknesses
Action oriented roles	 **Shaper**	• Challenging, dynamic, thrives on pressure • The drive and courage to overcome obstacles	• Prone to provocation • Offends people's feelings
	 **Implementer** (company worker)	• Disciplined, reliable, conservative and efficient • Turns ideas into practical actions	• Somewhat inflexible • Slow to respond to new possibilities
	 **Completer finisher**	• Painstaking, conscientious, anxious • Searches out errors and omissions • Delivers on time	• Inclined to worry unduly • Reluctant to delegate
People oriented roles	 **Co-ordinator** (Chairman)	• Mature, confident, a good chairperson • Clarifies goals, promotes decision-making, delegates well	• Can often be seen as manipulative • Offloads personal work
	 **Teamworker**	• Co-operative, mild, perceptive and diplomatic • Listens, builds, averts friction	• Indecisive in crunch situations
	 **Resource investigator**	• Extrovert, enthusiastic, communicative • Explores opportunities • Develops contacts	• Over - optimistic • Loses interest once initial enthusiasm has passed
Cerebral roles	 **Plant**	• Creative, imaginative, unorthodox • Solves difficult problems	• Ignores incidentals • Too pre-occupied to communicate effectively
	 **Monitor evaluator**	• Sober, strategic and discerning • Sees all options • Judges accurately	• Lacks drive and ability to inspire others
	 **Specialist**	• Single-minded, self-starting, dedicated • Provides knowledge and skills in rare supply	• Contributes only on a narrow front • Dwells on technicalities

http://w2.uco.fr/~cbourles/OPTION/Theorie/Belbin/Belbin's_team_roles_fichiers/belbin.gif

TEAM ROLES by Belbin

	Team role	Strengths	Allowable weaknesses
Action oriented roles	Shaper		
	Implementer (company worker)		
	Completer finisher		
People oriented roles	Co-ordinator (Chairman)		
	Teamworker		
	Resource investigator	• Extrovert, enthusiastic, communicative • Explores opportunities • Develops contacts	• Over - optimistic • Loses interest once initial enthusiasm has passed
Cerebral roles	Plant	• Creativ • Solves	…vely
	Monitor evaluator	• Sober, • Sees a • Judge	
	Specialist	• Single-minded, self-starting, dedicated • Provides knowledge and skills in rare supply	• Dwells on technicalities



NICE SET OF ROLES
…BUT WHAT ARE MISSING?
→ Purely harmful roles :)

http://w2.uco.fr/~cbourles/OPTION/Theorie/Belbin/Belbin's_team_roles_fichiers/belbin.gif

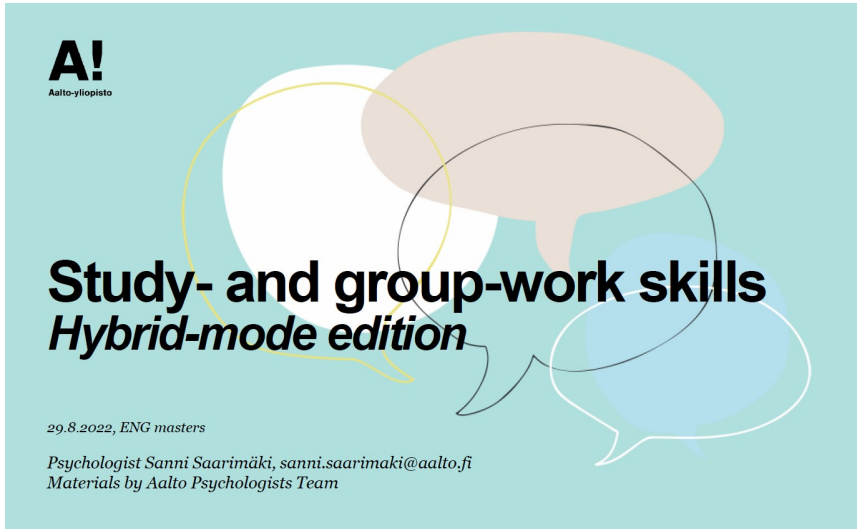
What is closest to yourself?
Have you seen other roles, too?
→ Talk with a pair

SOME GROUP ROLE CARICATURES

- SHAPER comes up with new ideas and provides structure
- OVERACHIEVER aims high, even at the cost of team spirit
- COORDINATOR focuses on the job + keeps up good spirit
- WITHDREWER stands back, does only what is asked to
- IMPLEMENTER focuses on implementation
- FREE-RIDER let’s others do the work, but takes credit
- SPECIALIST brings in-depth (but selective) knowledge

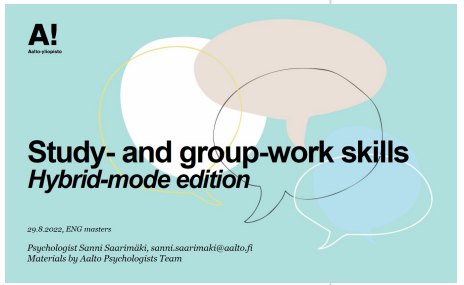
ENG Orientation Week

Useful presentations on e.g. scientific writing, intercultural communication, studying skills – and group work!
→ Check the presentations:
https://mycourses.aalto.fi/mod/folder/view.php?id=930751



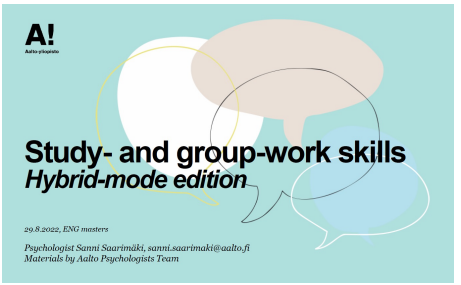
Next some selected slides from these two presentations

An Effective Team



- Shared and accepted goals
- Roles and tasks clearly defined
- Interaction, communication
- Resources, schedule

Communication in a Group



Task-oriented Skills:

- Communicating thoughts clearly
- Defining and analyzing problems
- Asking for specifications and reasons
- Finding and evaluating options

People-oriented Skills:

- **Listening**
- Showing empathy and support
- Creating good team spirit
- Encouraging others
- Solving conflicts

Misunderstanding vs Miscommunication

- **Misunderstanding**
  - ‘Language’ related

- **Miscommunication**
  - Misunderstanding of another’s norms, values and practices

Zhu (2014, pp. 115-129)

MISUNDERSTANDING

How to solve it?

- **Clarification & negotiation strategies**
  - **Confirmation checks**
    - e.g. 'Have you understood my explanation?, 'Did I understood it right?', 'Yeah?', etc.

Repetition

  - **Clarification request**
    - e.g. 'Can you explain a bit further?', 'Can you make it more simple?', 'Can you repeat?', 'When you said xxx, what did you mean?'

Identify a trouble source +
Ask open/non-judgemental Qs!

Aalto University
Language Centre

MISCOMMUNICATION

Directness/Indirectness

- Understanding "directness" and "indirectness" as **a spectrum**
- Being **polite/nice** ←----------?----------→ Being **clear**
  (Indirectness) (Directness)

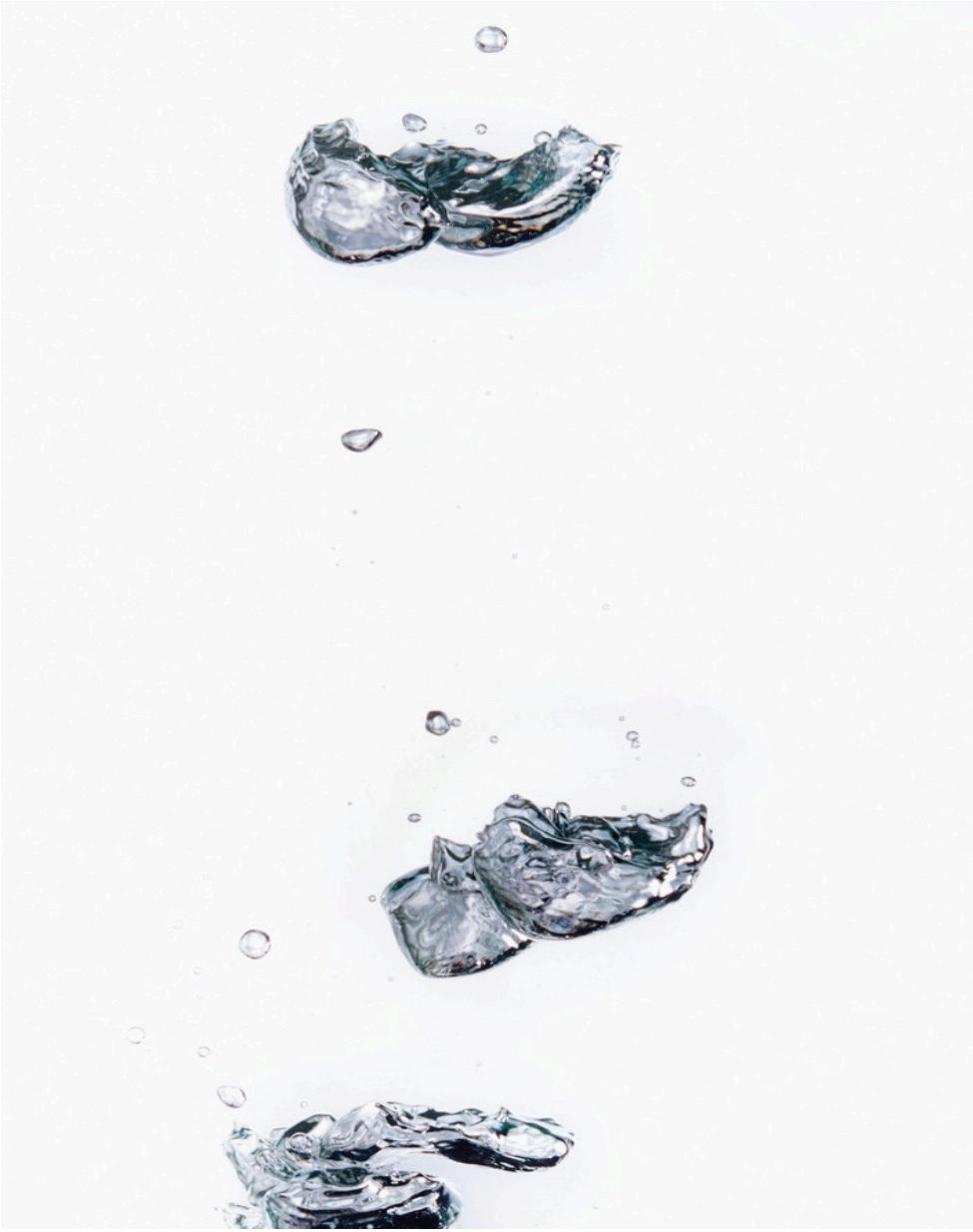
Socio-emotional processes?

Metacommunication

Task-related processes?

Aalto U
Language Centre

Questions, comments?



Group discussion

How does this all sounds?
Any surprises?

How you ensure **your group** would work well?

GROUP WORK: CHAIR

- Group will have a rotating Weekly Chair
  → Everyone should be a chair at least once; you decide the order
- Chair is responsible that group's weekly assignments are done well and on time
  → Makes sure that everyone contributes to the assignments in an equal manner: decides on division of responsibilities
  → Solves possible disagreements
  → Acts as group's contact person towards teachers

→ In sum, a great possibility to learn a lot!

YOUR GROUP! YOUR PROJECT!

- The group also forms your project team
  - → Your project: to successfully compete the different (group) assignments during the course
  - → Take this as an opportunity to practice your project planning and management skills as well: these are important part in our programme as well as your entire career

PROJECT PLANNING + MANAGEMENT

WHAT IS A PROJECT?

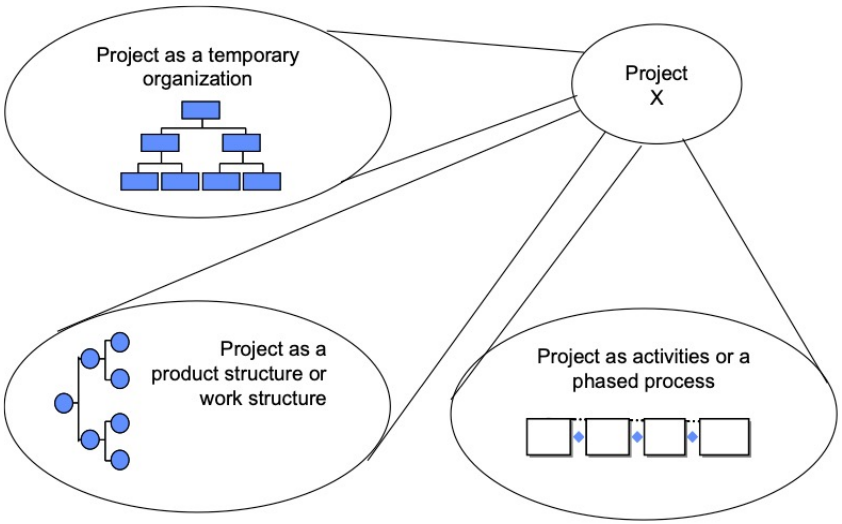


Figure 5. Three perspectives on projects

PROJECT LIFECYCLE

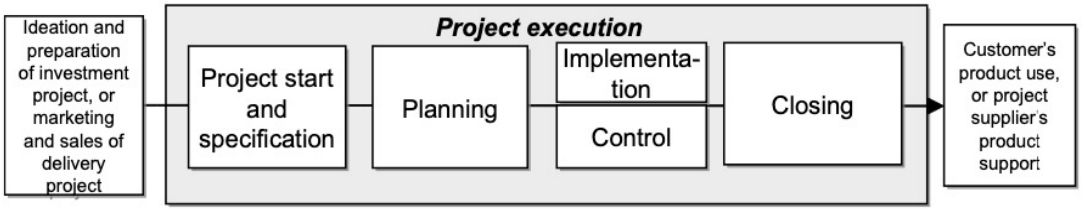


Figure 10. Project lifecycle and project execution

HOW TO MANAGE A PROJECT?

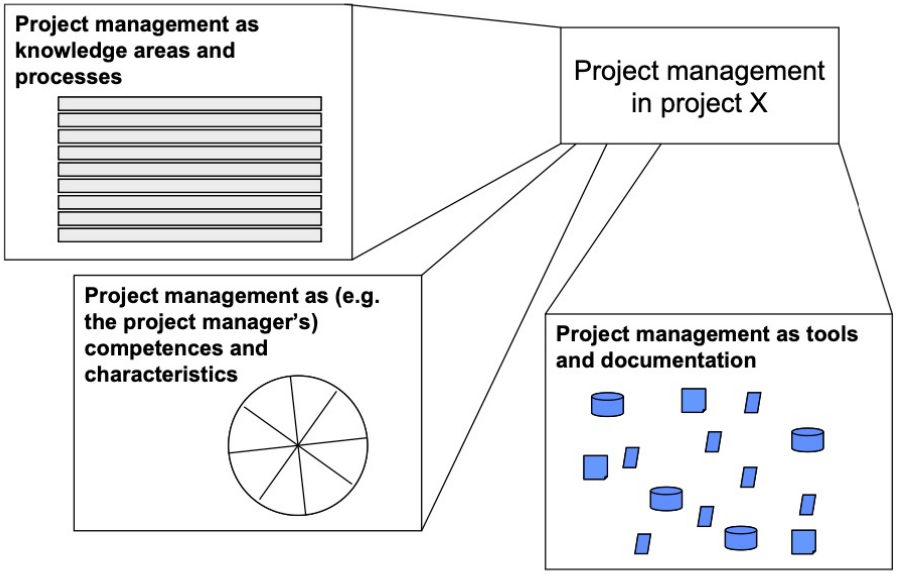


Figure 8. Three perspectives on project management

Artto et al. (2011): Project Business
→ Available in WAT-E1100 MyCourses

PROJECT + TIME MANAGEMENT

- Your tasks and exercises form your group's project
  → We give you the main aim and timeline i.e. deadline

- Based on the aim & timeline:

1) divide the aim into objectives and related activities

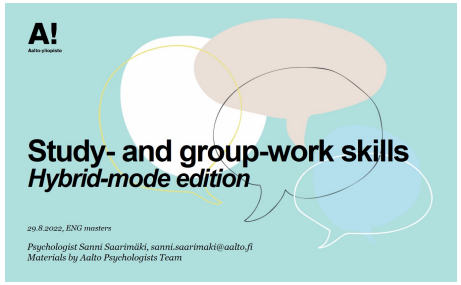
2) agree on the division of responsibilities (who does what)

3) plan and manage your time

→ Use SMART objectives

→ Decide on the 'level of enough'
i.e. when something is ready

Specific: what are we going to do?
Measurable: how to measure it is done?
Achievable: can we do it in the given time & resources?
Relevant: will this objective contribute to our main aim?
Time-bound: when will the objective be accomplished?

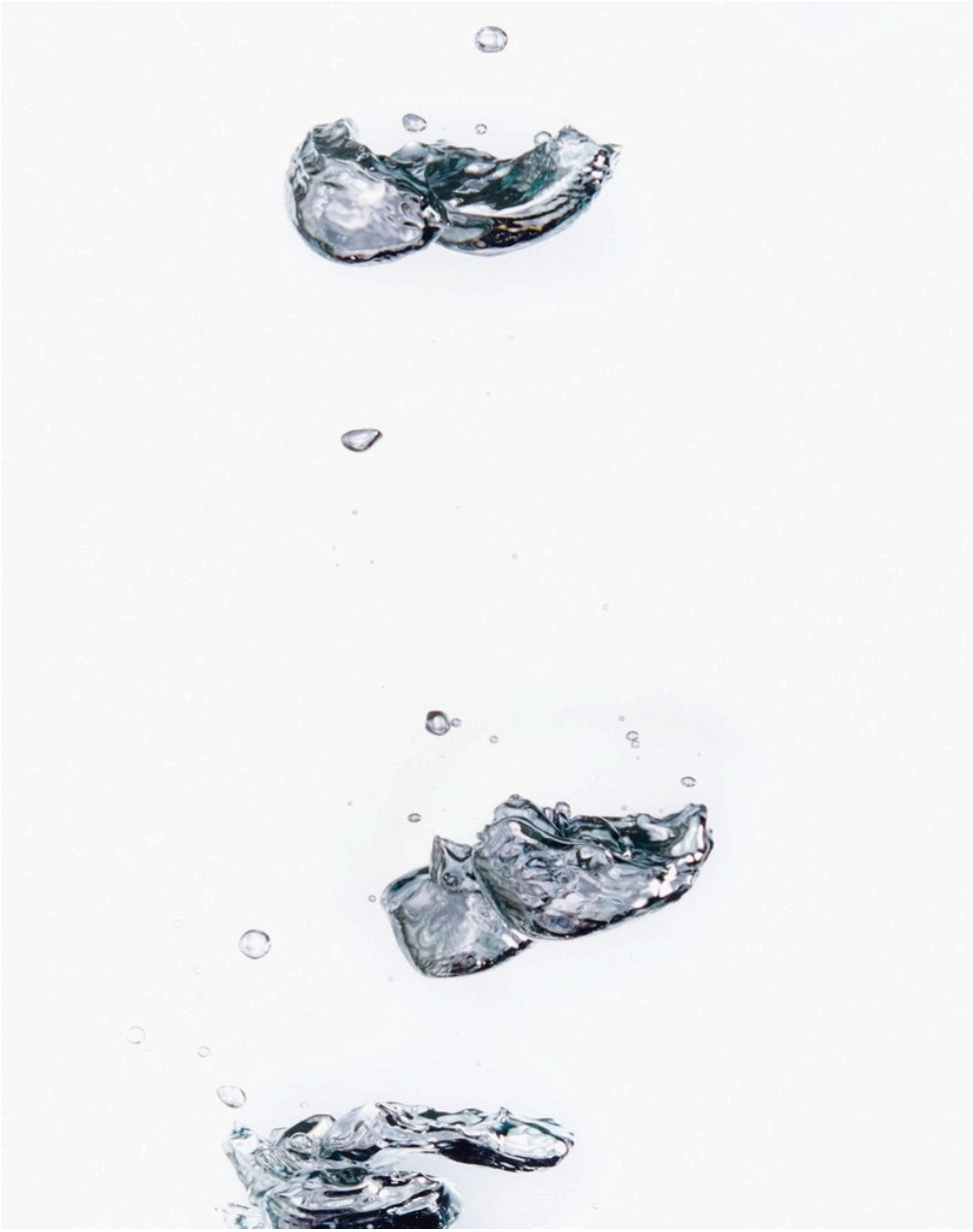


TIME MANAGEMENT

Important also for your studies in general

	Urgent	Not urgent
Important	• Crisis • Fire fighting • Pressing problems • Deadline-driven projects	• Planning • Preparation • Relationship building • Personal development • True recreation
Not important	• Interruptions • Some e-mails or phone calls	• Time wasters • Escape activities • Some e-mails or phone calls

Questions, comments?



YOUR RULES OF WORK

Based on this presentation and your discussions, agree on **Rules of Work** for your group (your first context task)

→ A clear set of rules that defines the principles for your group, including communication

→ Also agree **how you deal with two kinds of challenges**:
1) 'storms' including entire group, and
2) negative team role that an individual takes

→ Write down your rules and submit through MyCourses by the end of the week (this week's chair submits)

Thank you!

More information through MyCourses pages of WAT Course:

https://mycourses.aalto.fi/course/view.php?id=35667