

Erasmus
University
College

Horizontal skills line

CLI presentation

September 21, 2022



Aim horizontal skills curriculum

- Adherence to EUC's Intended Learning Goals
- Integrative, coherent, and interdisciplinary skills line
- Learning actual skills
- Transferring and applying knowledge and skills

Skills curriculum

Quad				
1	2	3	4	
Scientific approaches: An invitation	Academic skills	Qualitative methods & analysis	Quantitative methods & analysis	Basestone Reserch & Writing Project
How do several scientific disciplines 'do' climate science	Research and soft skills are essential in enabling students to face current challenges	Conceptual underpinning and application of qualitative research methods	Conceptual underpinning and application of quantitative research methods	Supervised research project to investigate a pressing societal challenge
Assessment				
Informed opinion column on climate science and citizenship Research oriented report (group)	Self-reflection and peer feedback active listening Prestation argumentation map on RQ Scientific essay (group)	Critical analysis of a published research paper Grant application; research proposal (group)	Exam Research paper (group)	Research proposal Research presentation Research paper (All three in groups)

Learning objectives Skills Curriculum

		Course				
Overarching Curriculum Learning Objective	Course Learning objective	Scientific Practice: An invitation	Academic skills	Qualitative Methods and analysis	Quantitative Methods and analysis	Basestone
<i>At the end of the first-year skills curriculum, students can:</i>		<i>At the end of the course, students:</i>				
1.	OCL03	Have an understanding of the role and functioning of science in modern society and the relations between science, policy and practice;	x			
2.	OCL03	Have an understanding of the historical roots and rise of scientific thought and practice;	x			
3.	OCL03	Are able to understand and critically reflect on the scientific method as a general principle of science;	x			
4.	OCL03	Understand and critically reflect on objectivity as a general standard of scientific practice;	x			
5.	OCL01	Develop key reading skills to improve comprehension of scientific texts such as: i) skimming, ii) scanning, iii) identifying the main ideas of texts, and IV: to cope with and integrate information from multiple texts.;		x		x
6.	OCL01	Know how to construct a sound research question;		x	x	x
7.	OCL01; OCL02;OCL03	Are able to form a research problem by connecting relevant theories to their research question;		x	x	x
8.	OCL04; OCL02	Are able to find relevant academic sources to inform their research project;		x	x	x
9.	OCL01; OCL02	Are able to summarize, combine and integrate the ideas of others in their writing (and avoid plagiarism);	x	x	x	x
10.	OCL01;OCL03	Are able to evaluate the use of theory in scientific texts critically;	x			
11.	OCL01;OCL03;OCL06	Understand core concepts in research methodology and apply basic qualitative and quantitative research designs;			x	x
12.	OCL01;OCL03	Are able to critically evaluate the quality and adequacy of the research methodology in qualitative and quantitative research;		x	x	
13.	OCL01;OCL02;OCL03;OCL04	Know how to write a literature review;				x
14.	OCL01; OCL04;OCL06	Be able to find, collect, clean and create their own research data;		x	x	x
15.	OCL01;OCL04;OCL06	Are able to process, describe, analyze and visualize data relations using analytical software (SPSS, R, ATLAS.ti);		x	x	
16.	OCL01;OCL03;OCL04;	Draw meaningful conclusions based on their analysis and communicate these effectively to their audience;	x	x	x	x
17.	OCL01;OCL05;OCL06;	Write a sound research proposal and research paper utilizing a quantitative or qualitative approach;		x	x	x
18.	OCL08	Are able to use creative means of communication, supported by their body language and voice to captivate their audience;		x		x
19.	OCL01;OCL02;OCL03;OCL04;OCL05;OCL06;OCL07;OCL08	Perform a small-scale research project from start to finish in a collaborative manner.				x

Skills Domains
Research skills (finding sources and data, collecting data, use of theoretical and empirical tools and analytical software)
Analytical skills (reading, comprehension, critical evaluation, and argumentation)
Academic Discourse (writing, presenting, communication)
Conceptual skills (use of conceptual frameworks)
Collaboration skills
Integration of all domains

Summative Evaluation

Macro level: adherence to EUC's Intended Learning Objectives 

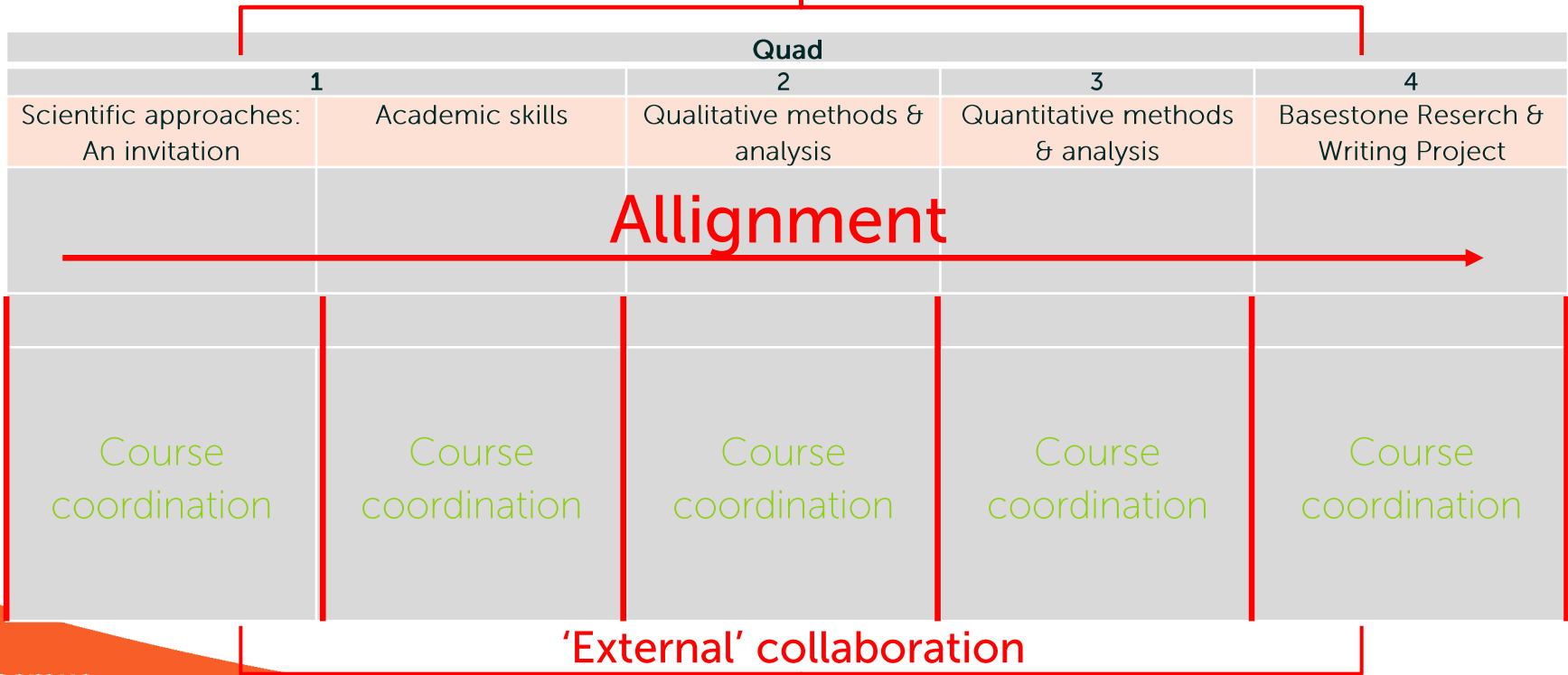
Meso level: alignment with 2nd and 3rd year courses plus capstone 

Micro level: course evaluations and grades 

Formative Evaluation

- Allignment
- Course coordination
- Project leadership
- 'External' collaboration
- Staffing
- Time

Project Leadership



Lessons learned

1. Project leadership is not sufficient
2. Clarity about responsibilities, tasks, and roles
3. Alignment with other courses
4. Coordination between courses
5. Less autonomy within courses: assessment; skills; pedagogy
6. Dedicated staff
7. PDCA cycle
8. Agreements on paper with 'external' partners

Tips

- Start with clear aims, learning goals, and plans
- 'Kill your darlings'
- One dedicated skills team; clarity about roles and responsibilities
- Do the PDCA cycle after every course for the whole skills curriculum with staff and students
- Involve external partners almost from the start on