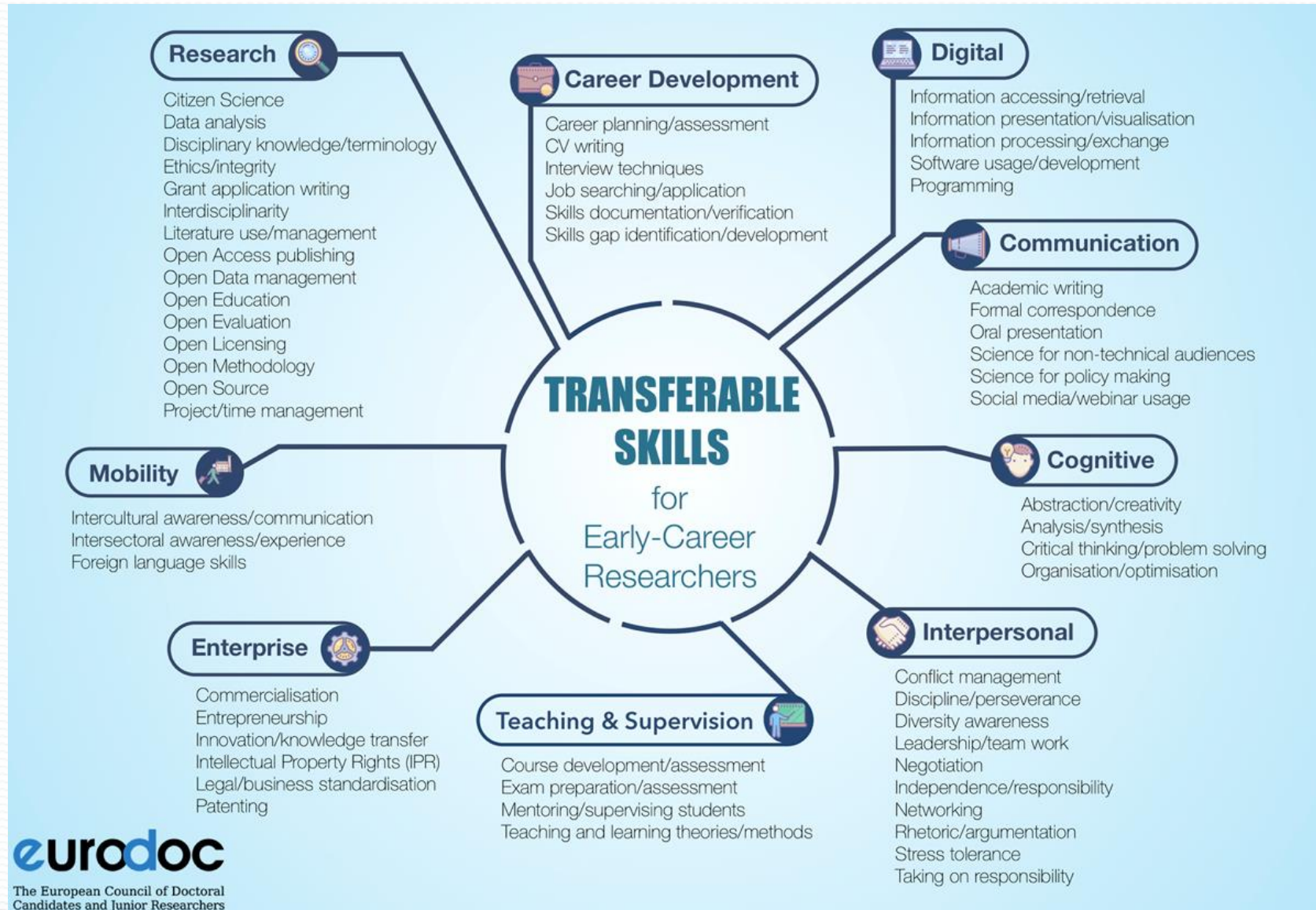


Transferable skills in 'Oceans & Lakes'



Liesbeth Pinti
Nico Koedam
Karolien Van Puyvelde
Diana Di Nitto

SCHEME transferable skills



Transferable skills* in 'Oceans & Lakes'

- Communication skills
- Mobility
- Interpersonal skills
- Research skills
- Digital skills
- Cognitive skills
- Career development
- Testimonials by alumni



with some Belgian art...

(*) "Transferable skills are skills learned in one context that are useful for another. They can serve as a bridge from study to work and from one career to another, as they enable subject and research-related skills to be applied and developed effectively in different work environments"

<http://eurodoc.net/skills-report-2018.pdf>

Where in the Learning Outcomes of O&L ?

LO 5

5. The ability to assume a responsible role in a pluridisciplinary team and, with overarching knowledge and insight, to develop collaboration with various sectors of society including the corporate sector (e.g. the harbour industry, tourism, fisheries, aquaculture).

...responsible
pluridisciplinary...

7

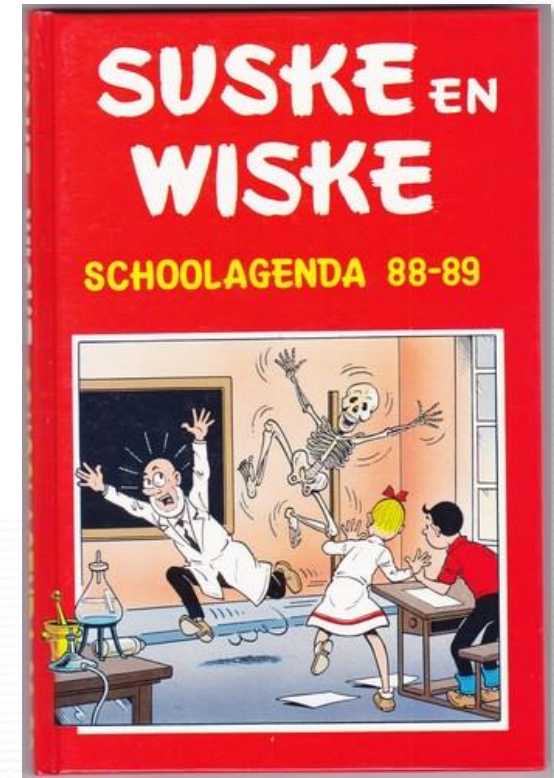
8

9

11

13

14



Willy Vandersteen

<https://www.devergeetachtigevijftiger.nl/school.html>

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...values of
multicultural society...

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...governance...

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...values of
multicultural society...

14

14. The ability to situate scientific insight, results of scientific research and technical achievements in a social perspective, against a political-historical (especially for the development-oriented finality), economical and governance-related background.

...social perspective...
development-oriented

Communication skills

- Academic writing
- Oral presentation
- Science for non-discipline audiences
- Science for policy making
- Social media usage
 - in several courses, presentations,...
 - "Seminars: Case Studies on Biodiversity Management"
 - "Monsoon School"



Constant Permeke

<https://www.moustique.be/archives/2015/06/19/expo-permeke-rehabilite-146524>



Finding and developing a logo for sustainable shrimp farming....

Mobility

- Intercultural awareness / communication
→ part of daily life in Oceans & Lakes



Paul Delvaux

<https://www.fine-arts-museum.be/fr/la-collection/paul-delvaux-train-du-soir>



Here: almost as many nationalities as people...



Talking about a world conflict (World War I) and reflection to societal issues today: discussion with the museum director

Mobility

- Intercultural awareness / communication
 - part of daily life in Oceans & Lakes
 - extra-curricular activities, e.g. Forum Opinionum²



FO² - Forum opinionum SQUAREd – Wednesday April 27th 2022 – 17:30-20:00

With a drink



FO²

"In matters of taste, there
can be no dispute"
*but on all other matters there
can be debate...*

we kindly invite you to participate in
this moment of reflection and
interesting discussion
with your fellow students, and
with journalist, writer, opinion maker

Majd KHALIFEH

about "**values**" – your opinion counts
<https://www.majdkhalifeh.com/>.

Dear fellow scientists & students,

Values.... What are those ? *Currency exchange rates, stock exchange, well yes,....* but that is not what this event is about.

In Oceans & Lakes we have a core activity which is directed towards **cooperation and development**.

VLIR-UOS puts forward: '**Sharing minds, changing lives**'. Its scholars are expected to be agents of change. Change of what ?

Along which values to be respected or realised ?

We have taken this as an inspiration to organise a **forum of opinions**, where all of us can be panel members, *Forum opinionum SQUAREd*, in short **FO²**. We will exchange ideas, thoughts, opinions...

This debate will be moderated by **Majd Khalifeh**, journalist, writer and opinion maker

When ? Wednesday April 27th, 2022 – 17:30-20:00. **Where ?** Building I 1.01 !

For whom ? For all, for MSc Oceans & Lakes students particularly. **Followed by a drink.**



Mobility

- Intercultural awareness / communication
 - part of daily life in Oceans & Lakes
 - extra curricular activities, e.g. “ *Forum Opinionum²* ”
 - *Fritto misto*



Fritto misto

Fritto misto

a dish: combination better than its parts



<https://www.ilclubdellericette.it/ricetta/fritto-misto-pesce/>

- Italian : '*mixed fried food*', usually seafood
- mixed : 3 universities, many student origins
 - fried : "*throw it all in the pan*"

Mobility

- Intercultural awareness / communication
 - part of daily life in Oceans & Lakes
 - extra curricular activities, e.g. "*Forum Opinionum*²"
 - *Fritto misto*
- Intersectoral awareness experience
 - in course "Governance and Policy in Development and Cooperation"



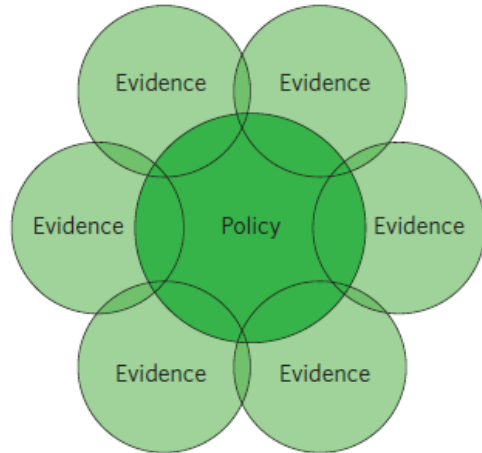
Meeting the European Commission Directorate-General "Europeaid"





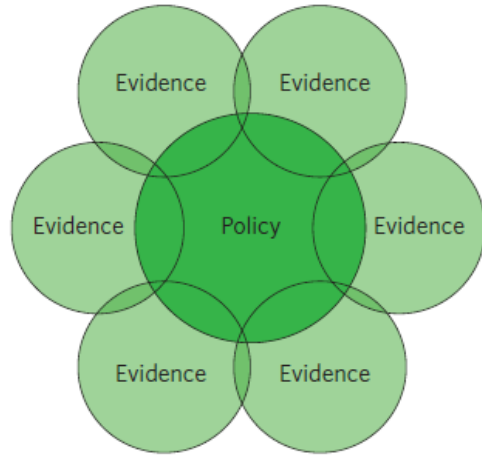
Meeting the chairperson of the cooperative body of collectors of *concha negra* in Tumbes (in the 'field'), Peru

How scientists –*seem to*- think policy works

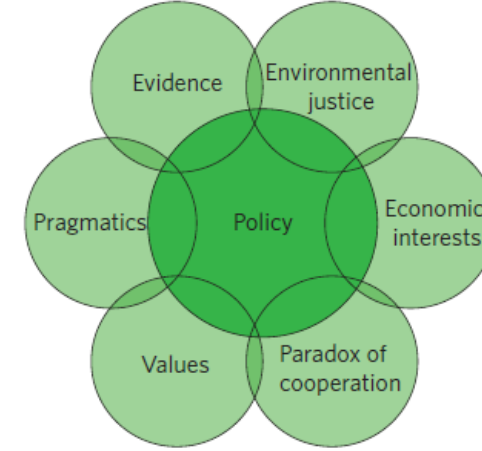


Rose, 2014

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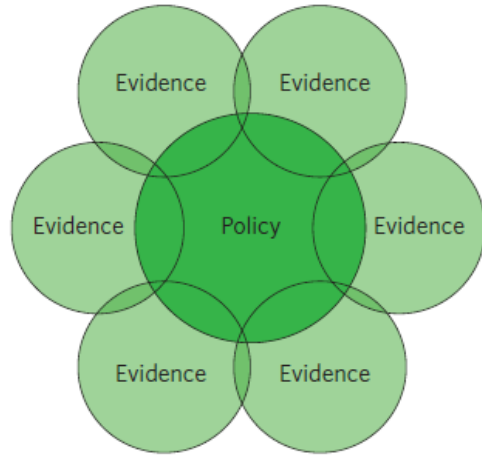


How policy-making actually works

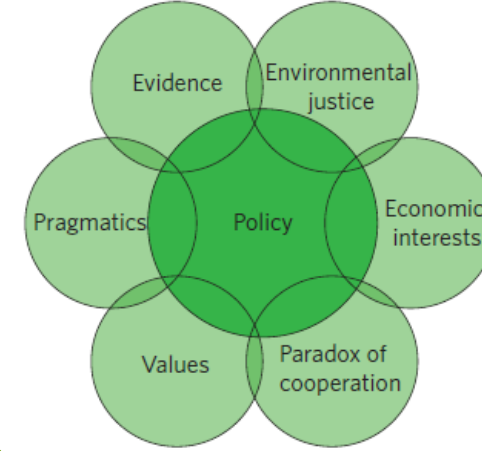


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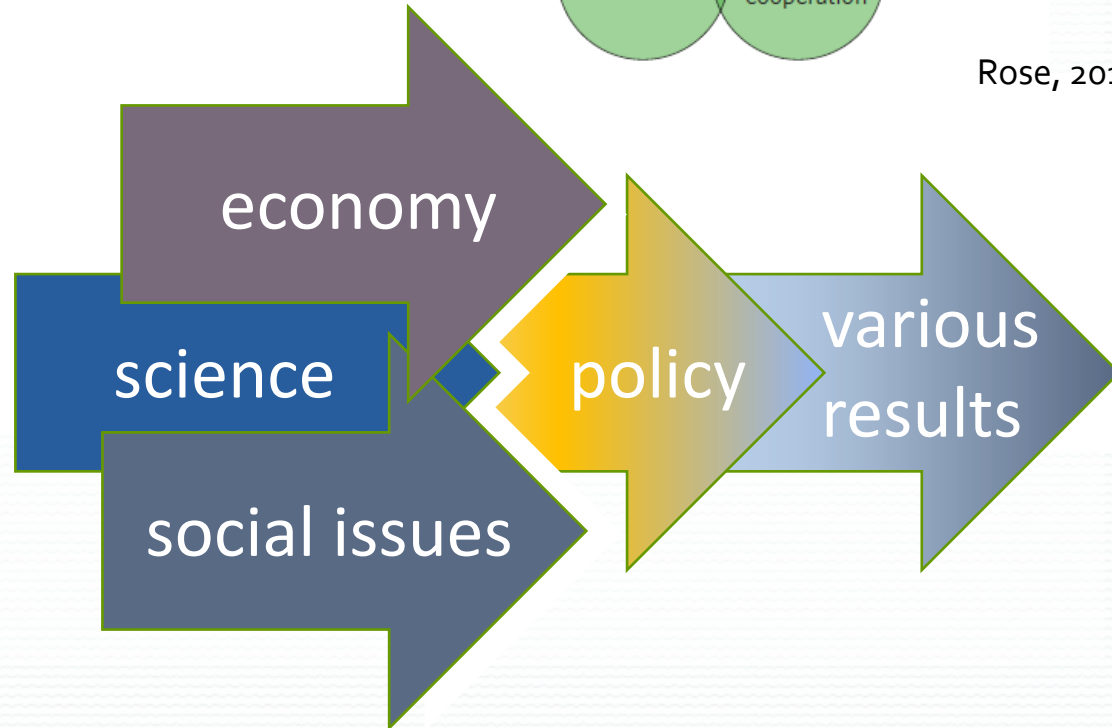


How policy-making actually works



Rose, 2014

Because:



Interpersonal skills

Interpersonal:

- Conflict management
→ by daily life in Oceans & Lakes, as a student ☺
- Discipline/Perseverance
→ O&L is a very heavy programme, students definitely learn to persevere
- Diversity Awareness
- Leadership/team work
→ through group works in the courses
- Independence/Responsibility
- Networking
→ OORI event, Monsoon School
- Rhetoric, argumentation
- Stress tolerance
→ daily life in Oceans & Lakes ;)



René Magritte

https://arhive.com/fr/renemagritte/works/333476-The_lovers



Leadership..... works with teamwork



Long, hot, dusty road trips, with your (international) professors....

Research skills

Research and research management

- Interdisciplinarity
→ Interdisciplinary master programme
- Literature use/management
→ MSc thesis, several assignments for courses
- Project management
→ "Monsoon School"
- Intellectual Property Rights
→ in course "Governance and Policy in Development and Cooperation – part II"



Hergé

<https://www.lastdodo.nl/nl/items/2011561-professor-zonnebloem>

Skills developed

- Project definition – embedding in policy & governance
- Project writing
- Presenting skills, incl. timing
- Living with deadlines
- Evaluation and peer assessment (*“two sides of the table”*)
- Functioning in the dual role in science policy
- Learning from peers
- Respecting intellectual property

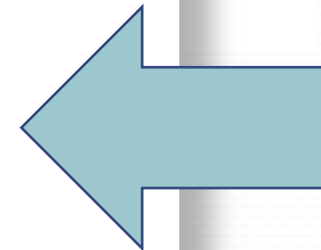
Governance and policy
in
development and cooperation



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Governance and policy
in
development and cooperation



Digital skills

- Information accessing/retrieval
- Information presentation/visualisation
 - Several presentations for several courses
- Software usage
 - "Introduction to data mining"
 - "Advanced applied statistics"
 - "Environmental modelling"



Pierre Alechinsky

<https://www.lalibre.be/culture/arts/2017/06/06/force-decrite-de-la-main-droite-pierre-alechinsky-dessine-et-peint-de-la-main-gauche-IHCOYBYVENGHFRJNLCU34Y6M/>

Course Specifications

Valid as from the academic year 2016-2017

Environmental Modelling (C003809)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size	(nominal values; actual values may depend on programme)			
Credits 3.0	Study time 90 h	Contact hrs	30.0 h	
Course offerings and teaching methods in academic year 2021-2022				
A (semester 2)	English	Gent	lecture	15.0 h
			seminar: coached exercises	15.0 h
Lecturers in academic year 2021-2022				
Soetaert, Karlina		WE11	lecturer-in-charge	
Bonte, Dries		WE11	co-lecturer	
Offered in the following programmes in 2021-2022			crdts	offering
Master of Science in Marine and Lacustrine Science and Management			3	A

Teaching languages

English

Keywords

Position of the course

Contents

Present day environmental problems (e.g. eutrophication, contaminant dispersal, climate change, ocean acidification) require a quantitative approach. To better understand how natural systems respond to such changing inputs and boundary conditions, biogeochemical models of varying complexity are being called upon. The central aim of this course is to learn how to develop and apply such models. In this course we will focus particularly on elemental cycling (Carbon, Nitrogen etc) and transport of contaminants within aquatic ecosystems (e.g. rivers, estuaries, lakes, oceans). Models are implemented in the open-source programming language R.

Models in the environmental sciences.

- What is a model?
- Types of models
- Model examples (e.g. North Sea, Scheldt estuary, ocean acidification)

Construction of models

- Balance equations, boundary conditions, transport formulation, kinetic rate laws
- Reactive transport models (box models, 1D, 2D and 3D)
- pH models, acid-base chemistry and CO₂ uptake

Model solution

- steady-state solutions versus transient solutions
- analytical versus numerical solution
- numerical integration procedures

Model applications

- Causes of uncertainty in model predictions
- Sensitivity analysis
- Fitting models to data: parameter estimation, cost functions, estimators (least squares, maximum likelihood)
- Parameter uncertainty
- Model selection

Contents

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Cognitive skills

- Abstraction/creativity
- Analysis/synthesis
- Critical thinking/problem solving
- Organisation/optimisation



Jan Verhas

<https://www.mskgent.be/nl/nieuws/de-meesterschilders-opdrachtenbundels-voor-kinderen>



Career Development



Alumni events

- *Oceans of Opportunities, Rivers of Ideas* (Dec, 2018) - alumni networking event
- Keynote speeches, pitch presentations, round table discussions
- Goal:
 - to connect alumni and students
 - to give students idea of internships, job opportunities of aquatic scientist
 - to help create network and opportunities
- Live streaming + recordings (alumni @ home)
- More info:
<https://www.oceansandlakes.be/oori>

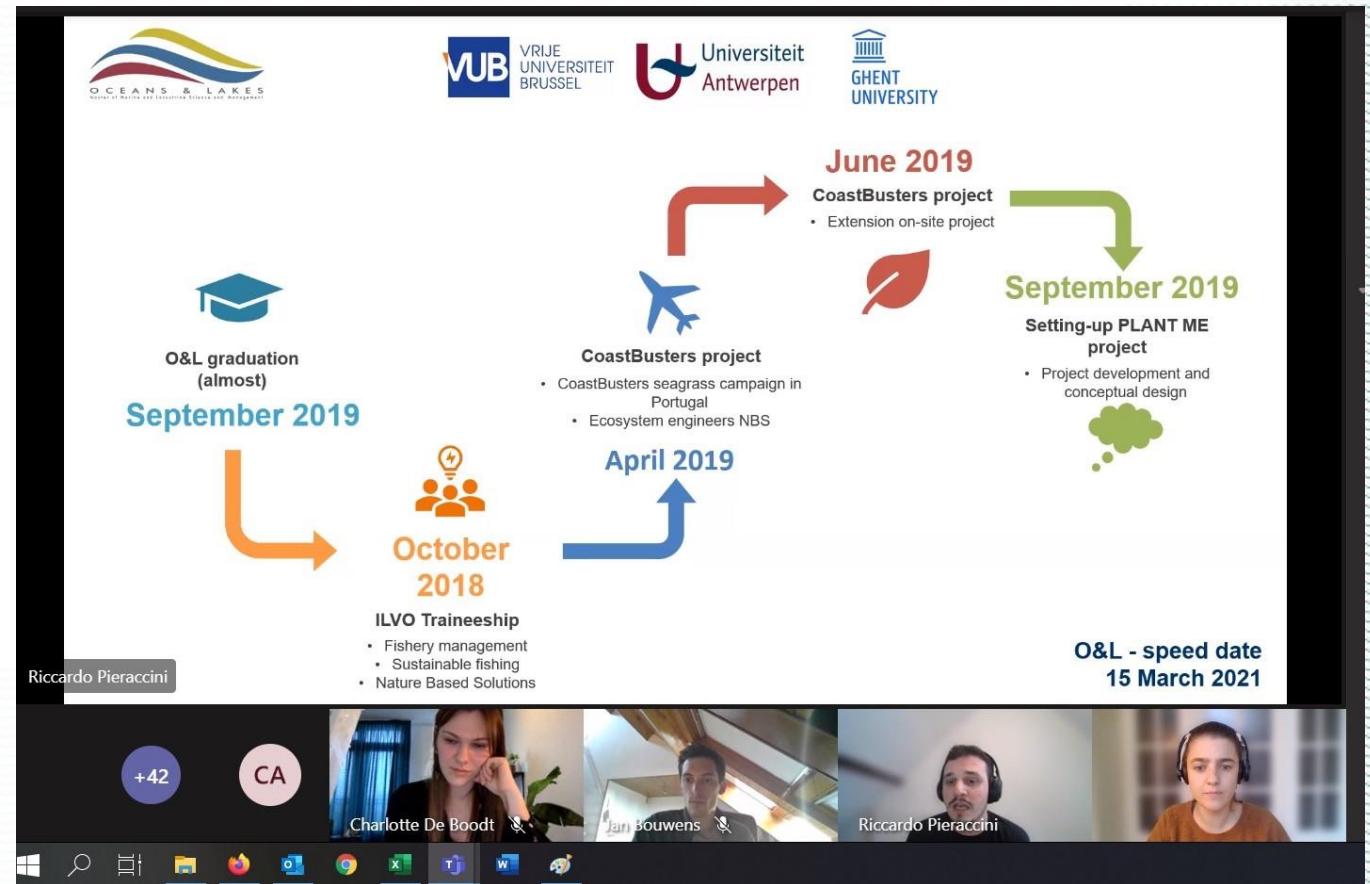


Career Development



Alumni students speed date

- Online meet up with alumni, different sectors and countries
- 1st part: presentation about their career, their job search, professional experience
- 2nd part: break out rooms, specific questions
- Goal:
 - to connect alumni and students
 - to give students idea of internships, job opportunities of aquatic scientist
 - to help create network and opportunities
 - to learn first hand from alumni what to pay attention to, get tips about application process, etc.



Career Development

VUB Career Coaching

<https://student.vub.be/en/career-coaching#individual-career-coaching>

- Career guidance for students in starting the search for a job / internship
- Workshops: job orientation, application process, selection process
- Specific Oceans & Lakes session: 1x per year:
 - Motivation letter
 - Cover letter
 - Curriculum Vitae
 - How to figure out your strengths, skills
 - LinkedIn, other media
 - Where and how to look?
 - Application and selection process

Application

- Evaluation of course Summer School: apply for fictional job of coordinator
- Prepare Cover Letter, CV
- Job interview



Frans Masereel

https://www.google.com/url?sa=i&url=https%3A%2F%2Fm.nieuwsblad.be%2Fcnt%2Fdmf20220408_g3667015&psig=AOvVawoNOT45_-NZiCC7KJL4hAIJ&ust=1654358487285000&source=images&cd=vfe&ved=0CAwQjRxqFwoTCJjG3_LTkfgCFQAAAAAdAAAAABAd

Career Development



Summer school evaluation

Several of you will or may have attended a summer school outside the regular university ECTS offer, while it is part of your MSc curriculum. Some of these summer schools provide an evaluation but most of them do not. Therefore in order to be able to evaluate you all in a similar way, we want you all to perform the following two tasks:

1. Write a **report of 3 to 5 pages** on the subject and content of the summer school including introduction to the organisation, topic(s), objectives, methods, time schedule, lessons learned and missed opportunities
2. Apply to a call for a position (see below) of the organization that provided the summer school you attended. They are looking for a coordinator to organize a series of related summer schools for the next years.

In addition to **your CV** they are asking for a **3 pager with your vision** on summer school organization including practical and intellectual aspects (see call).

After your application you will be invited for an **interview of half an hour** by a (mock) recruitment panel from the organization.

Evaluation will be mainly based on the report (30 %) and the application document (30%). You will also receive feedback on the CV as well as on the interview (40%).

To improve your skills on how to deliver an appropriate CV you will be invited to attend a course at the VUB during the second semester (by VUB Career Center - tbc).

For your interview the following suggestions can be helpful:

Career Development



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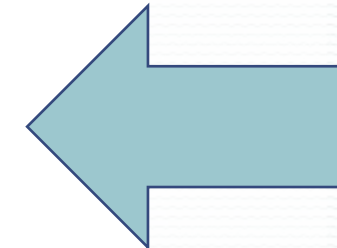
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Testimonials by alumni



- Cristina Mino Arias
Small Islands Developing States Intern at UNESCO
- Haris Paliogiannis
Policy Officer at Mediterranean Information Office for the Environment, Culture and Sustainable Development (MIO-ECSDE)
- Arida Fauziyah
PhD student at Institut Teknologi Bandung
- Coralie Verhaegen
Communication officer at Belgian Biodiversity Platform
- Rey Harvey E. Suello
*Ecosystem Management Research Group (ECOBIE)
PhD researcher University of Antwerp*



Jan Verhas

Just dispersed over course elements ? Or structural ?

- Recognisable ? Feedback ?
- Trained and improved ?
- Peer training, role models ?
- Scored ?
- Appreciated by students and lecture team ?
- Effective ?
- Valorising special skills of an individual ?



Emile Claus

<https://www.belfius-art-collection.be/be-fr/artwork/inondation>

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