



Graduate School
of Life Sciences

Guiding students Interdisciplinary Education

dr. Geert Ramakers & dr. Gönül Dilaver



UMC Utrecht

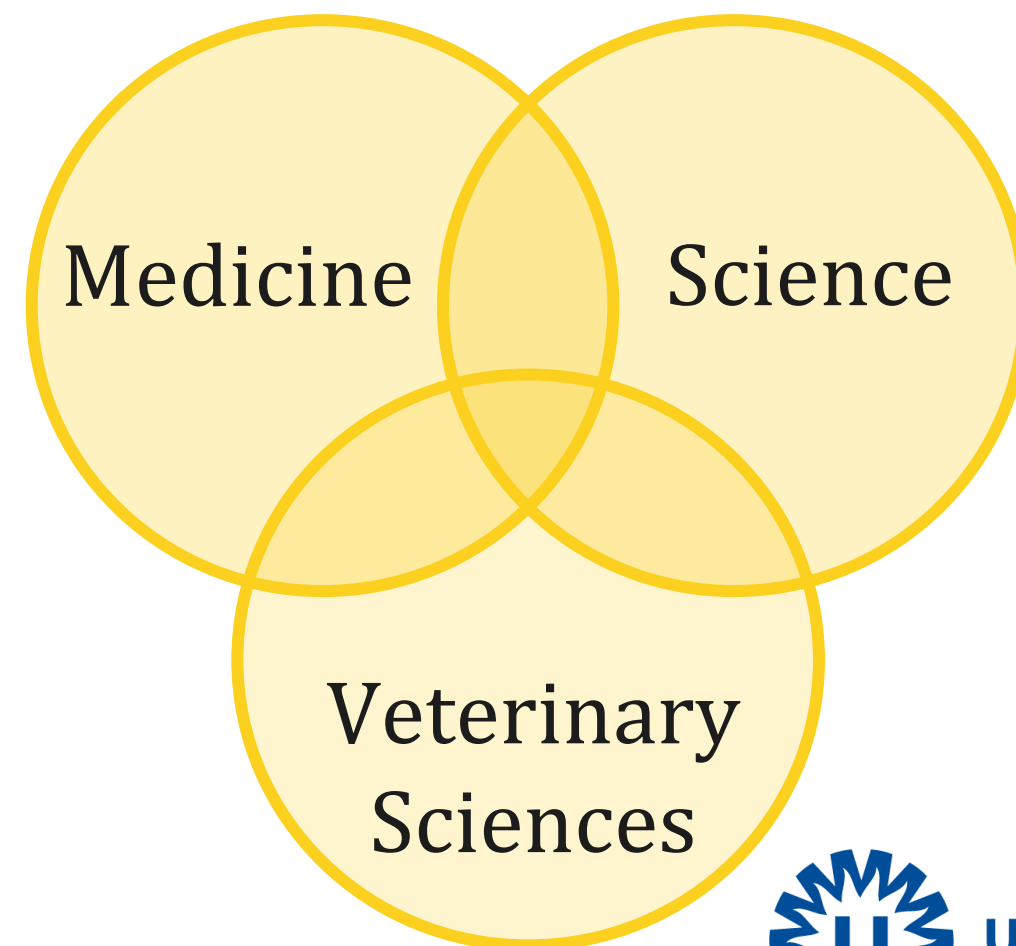
Master's programmes

- Biofabrication
- Biology of Disease
- Bio Inspired Innovation
- Cancer and Stem Cell Biology
- Drug Innovation
- Environmental Biology
- Epidemiology
- Epidemiology postgraduate
- Infection and Immunity
- Molecular and Cellular Life Sciences
- Neuroscience and Cognition
- Regenerative Medicine and Technology
- Science and Business Management
- Toxicology and Environmental Health

650 students/year, primarily biomedical

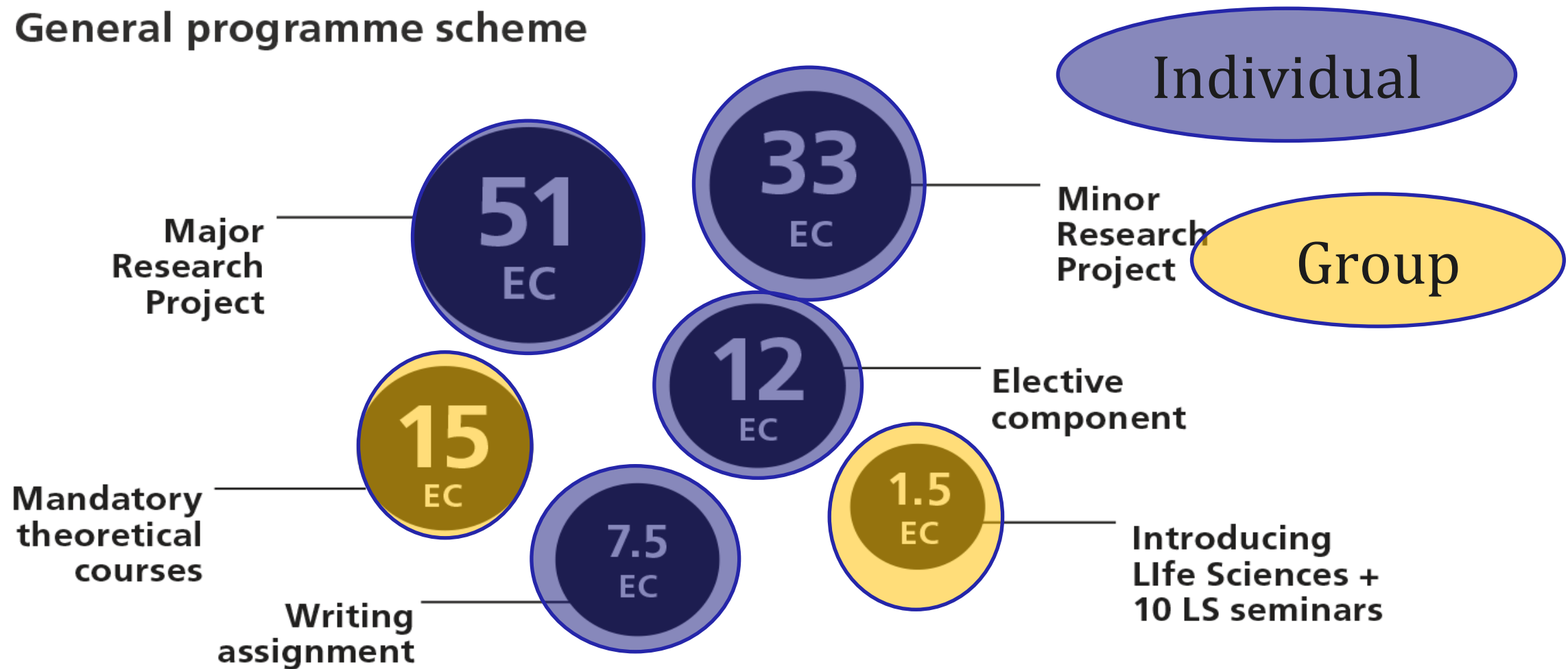
Mission: To provide future scientists the knowledge, skills and insight they need to take on top research positions around the world.

Faculties



2-year programmes (120 EC)

General programme scheme



Challenge

1. Provide guidance in highly interdisciplinary environment
2. Create community in strongly confined time frame (only < 1% of total EC)

Solution

Two modules:

1. Introducing Life Sciences
2. Navigation towards Personal Excellence

“Introducing Life Sciences”, a joint start for all Master’s programmes and students

Goal:

- General academic skills
- Enabling students to make conscious choices in their study
- Life Sciences Community



Introducing Life Sciences

Introduction week for all first year Master's students of the Graduate School of Life Sciences 2016

Programme overview

Please note: Programme for February 2016 students starts on Tuesday September 6th

MONDAY 5 SEPT	TUESDAY 6 SEPT	WEDNESDAY 7 SEPT	THURSDAY 8 SEPT	FRIDAY 9 SEPT
9.30-10.30 Registration	9.00-10.45 Administration offices open	9.15-11.15 Alumni	9.00-12.20 Mini-symposium U/ Select	9.15-11.00 Academic writing
10.30-11.45 Introduction to the Graduate School of Life Sciences	11.00-12.00 Scientific integrity			11.00-11.30 Keynote lecture 2
Lunch*	Break	Lunch with alumni*	Break	Lunch with student committees*
12.30-14.00 Introduction to the Graduate School of Life Sciences	13.00-15.15 Scientific integrity	13.15-14.15 Going abroad	13.00-14.10 Keynote lecture 1	13.00-18.00 City game
14.15-17.00 Get-together with own Master's programme	15.30-17.00 Buddy programme	14.30-14.45 Directing your profile	14.30-16.30 Valorisation & industry workshops	18.00-Late Drinks, Dinner, Party

Navigation Towards Personal Excellence

Goal: Make the most of your master in the multidisciplinary field of Life Sciences

Series of workshops

- I Study Crafting (year 1)
- II Envisioning your future (year 1)
- III Off you go! (year 2)

Graduate School of Life Sciences

I. Study Crafting

Time	Content	Tool
1. Intro 5'	Introduction on objectives and programme of the day and the rest of the two years	
2. Start up 30'	Questions to be answered with Socrative:	Start Up Questions Socrative App
3. Quality assessment 30'	1 students fill in the quality list individually (3') 2 In pairs students discuss their answers (10') 3 Students put a red dot next to the most important objective and a green one on the least important objective	Assignment 1 on paper One flip-over with the learning objectives Coloured markers
BREAK 10'		
4. Study crafting 30'	In table groups of 6 students discuss how to craft their study to match their developmental plans.	Assignment 2 Study guide
5. Interest assessment 30'	Students fill in the form individually (3')	Assignment 3
6. Evaluation 15'	1 What did you learn in this meeting? 2 How could we improve this meeting?	

I. Study Crafting



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Our Apps

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I. Study Crafting

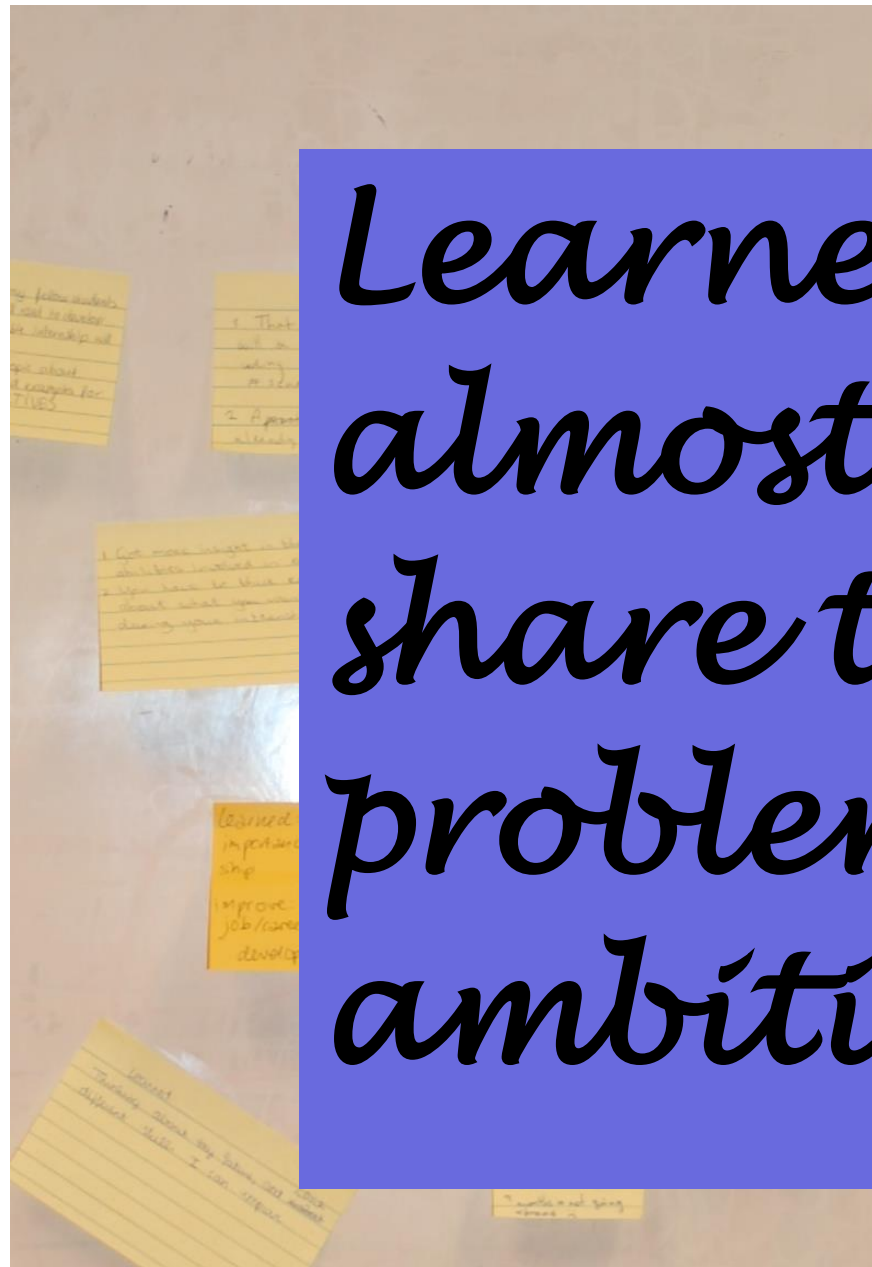
Appendix 1

Assignment 1 Your qualities and the ones to develop

Qualities	Need to develop			Already possess	
	1	2	3	4	5
1. Insight in at least one specialised subject of Life Sciences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Insight in recent developments and their implications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Adequately use and interpret specialist literature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Translating a Life Sciences problem into a relevant research question	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Designing a suitable research plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Testing of the research questions, according to methodological and scientific standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.					
8. Independently performing research, with the required accuracy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Handle, analyse, interpret and evaluate the empirically derived data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Discuss outcomes of empirical research and linking them with scientific theories	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Critically reflecting on your own research work in Life Sciences, from a social perspective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Comprehensibly reporting research results verbally and in writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Function effectively in a multidisciplinary research team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Reflect on your own development and study career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Motivate and adjust yourselves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Function independently and result oriented in a competitive labour market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Being eligible for a PhD position or a position in other sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I. Study Crafting

Learned: that almost all of us share the same problems and ambitions



Navigation Towards Personal Excellence

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- II Envisioning your future (year 1)
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II Envisioning your future

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II Envisioning your future

Program (2,5- 3 hours):

Time	Content	Equipment
1 Intro '5	Intro on: 1 Objectives and program 2 Place of the meeting in the 'Navigating...' series 3 The guest speaker(s)	Big room (s), 2 'round table'-settings M&M's Frisdrank?
2 Warming up '30	1 Students fill in the 'Qualities' form they already filled in the 1 st meeting. 2 Short plenary inventory of the progress students made with Socrative: How much progress did you make? (a. none, b. a bit, c. much)	Students' own quality forms and some extra copies for those who forgot (see appendix 1) Socrative
3 Learning climate at internship '10	Check whether the learning climate at their internship is open and helpful enough.	5 Socrative questions, (see appendix 2)
4 Alumni presentations '20	Two 10- minute speeches of alumni focused on why they made the choice for their internship (abroad or in the Netherlands).	
5 Round table discussions '45	Students choose for one of the 2 'round tables' where they can ask alumni for practical suggestions on how to organize the internship that you want.	±8 studenten per alumnus. Studenten rouleren langs de tafels.
6 Short Plenary discussion '10	-What questions remain -What is the most important insight -Refer to the practical suggestions for going abroad by the International Office	Print out of suggestions of International Office
7 Assignment Study crafting 2 '20	Plenary instruction Students fill in the questions individually ('5) And discuss with their neighbors Short plenary discussion: What did you learn, What plans did you make?	Assignment on paper (see appendix 3)
8 Evaluation '5	- Students fill in on yellow pads: 1. What did you learn in this meeting? 2. How could we improve this meeting? -Students paste their yellow pads on two flipover sheets when leaving the room.	Yellow pads Flipover with question 1 on top and Flipover with question 2 on top (camera to take a picture of the results)

Navigation Towards Personal Excellence

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III Off you go

Webinar by program coordinator + expert career services

Students have to watch video clips in preparation

Students search jobs and write applications



Off you go! Video clips on expectations of students and future employers

The two modules trigger the following questions for the students

1. Who am I?
2. What are my capacities?
3. What are my ambitions?
4. How do I achieve my ambitions?

These questions help students to create their individual roadmap for an interdisciplinary Life Science career



From left to right: Mieke Lumens, Karin Scager, Shirrinka Goubitz, Geert Ramakers, Gönül Dilaver