

UNIVERSITÉ DE MONTPELLIER

STUDENTS' HANDBOOK

Your toolbox for your IDIL journey

FRANCE 2030

UNIVERSITÉ DE MONTPELLIER



Hello, Welcome IDIL Students!

The IDIL Graduate Program offers the possibility to personalize your learning experience. You will attend introductory courses to explore various disciplines outside our focal field of study called Non-core modules. Transversal teaching units will help you develop skills for your future professional life. You will also access a list of internship options. You may use this to start your quest to find your future internship in line with your learning objectives. Finally, two senior researchers will guide you throughout this process: a tutor will help you navigate the academic curriculum and a mentor will assist you as you build your IDIL learning experience. Your mentor will facilitate your integration at the research institute, and show you how to expand your knowledge in your discipline during your research activities.

Now that you know more about what makes IDIL special, please read this handbook carefully as it will be your guide throughout your IDIL journey.

We wish you a successful and enriching academic year!

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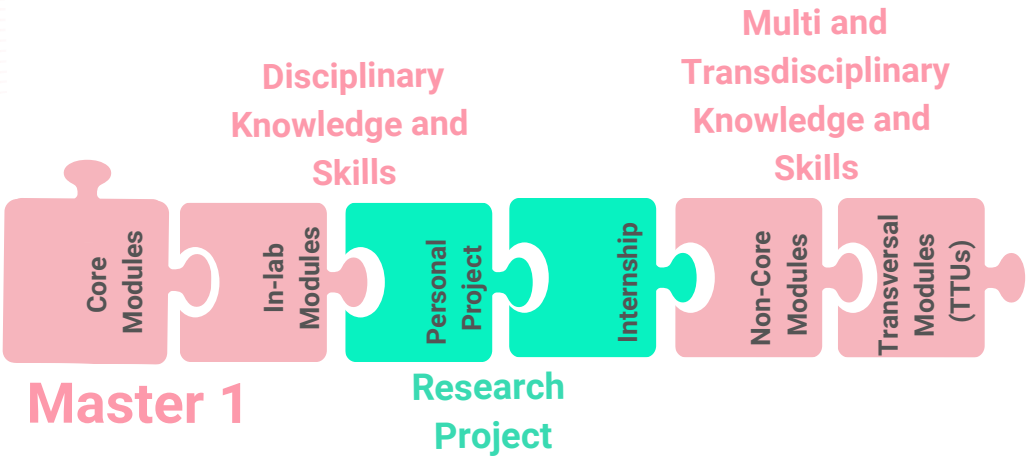


Research and Multidisciplinarity

Pillars of the IDIL Graduate Program

At IDIL, one of our main objectives is to help you become a future professional specialized in your discipline. Hands-on research activities will allow you to deepen your disciplinary knowledge actively. Research will also enable you to develop the use of critical thinking through the scientific method.

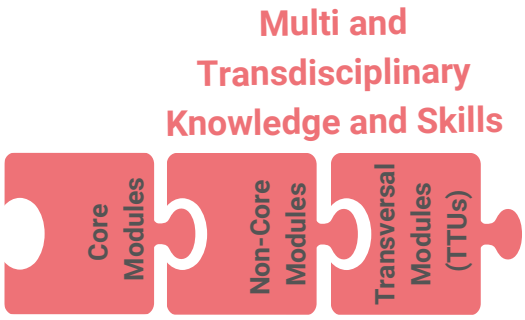
As an IDIL student, you will learn how to communicate and work collaboratively with students from other disciplines. You will have different opportunities throughout your studies to do so: the Non-core modules, the TTUs, and taking part in the IDIL House Cup (a friendly competition gathering IDIL students from all disciplines).



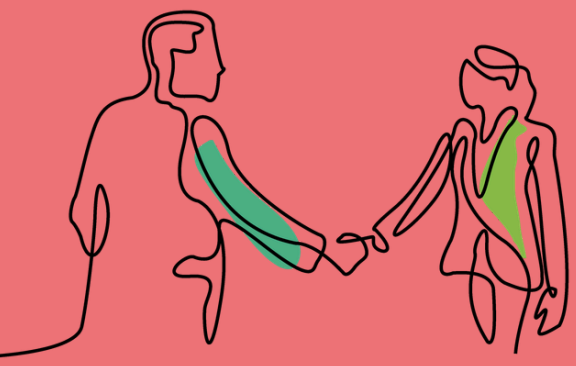
Multidisciplinary research is key for solving current and future world challenges from complementary angles.

In your second year, you will co-construct a Multidisciplinary Project Proposal with IDIL students from different fields. This task will require a strong foundation in your discipline and the ability to communicate and work effectively in an interdisciplinary team, as well as aptitudes in project management and autonomy by mobilizing all the knowledge and resources IDIL provides you.









Who does what?
The IDIL Roles

The head of your Masters' Track

- oversees and manages your Master's track within the IDIL Graduate Program at the University of Montpellier.
- designs and improves the curriculum for your specific disciplinary track.
- facilitates effective communication within various contexts: within your disciplinary track, with the IDIL team, and at the faculty level.
- offers support and mentorship to help you navigate challenges and make informed decisions.
- guides the student to a mentor if you did not find one at the mentor-mentee meeting.
- coordinates the assessment session of your Personal Project and your research internship evaluation.

Your tutor (only in M1)

- helps you define your learning objectives (notably by helping you choose your teaching units).
- provides you with pedagogical support during your first year of your Master's degree or engineering program.
- helps you organize your interactions with your Mentor.
- supports you in writing your Personal Project.
- helps you, along with your mentor, to acquire the necessary disciplinary knowledge beyond the research project you will conduct in the research institute.
- is involved in the assessment processes of your work and those of other students.

Your mentor (M1 and M2)

- is a researcher from one of the partner laboratories of the University of Montpellier who will supervise your 6-month research internship, both in M1 and M2.
- helps you to develop your academic and professional career through research by helping you get involved in the research institute dynamics (seminars, research programs, team meetings, etc.)
- supports you in writing your Personal Project.
- helps you explore necessary disciplinary knowledge that goes beyond the research project of your internship in M1
- provides external assistance for your multidisciplinary group project in M2.



Multidisciplinary Project Advisor (only M2)

- also called Referent in French
- is a researcher who will guide your multidisciplinary group during your assignments.
- helps you to (1) define a multidisciplinary research topic, (2) formulate specific research questions for your discipline, (3) identify some hypotheses, (4) find the methods and protocols to address your question, and (5) project the expected results and possible caveats.

Note: your referent will not necessarily be a researcher from your discipline. They will guide your group in the how-to of the research approach, not for disciplinary knowledge. You can ask for advice from your respective mentors if you need further scientific insights.

Your IDIL contacts



Agnès Fichard-Carroll
Co-Head of IDIL



Mathieu Sicard
Co-head of IDIL



Camille Paulhan
Project Manager



Killian Jodard
Administrative Officer

- Internship agreements, follow- up, and gratification
- Information about Scholarships
- Administrative Support



Ginna Kurmen
Instructional Designer

- Non-Core modules
- Transversal Training Units
- Multidisciplinary Project
- Moodle



Quentin Thébault
Communication and Community Officer

- IDIL House Cup: Events
- IDIL Interviews
- Social Networks



Laura Hutton
International promotion officer (SAIA & DRI)

- IDIL Ambassadors
- International Students
- IDIL Alumni Network

Contact us

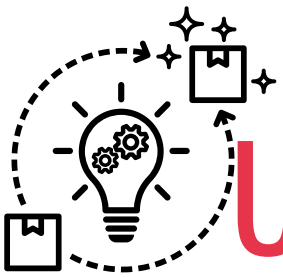


For general queries, please contact idil-team@umontpellier.fr.
For specific ones:

- Killian Jodard: killian.jodard@umontpellier.fr
- Ginna Kurmen: ginna-stephany.kurmen-gil@umontpellier.fr
- Quentin Thebault: quentin.thebault@umontpellier.fr
- Laura Hutton: laura.hutton@umontpellier.fr
- Camille paulhan: camille.paulhan@umontpellier.fr

If you are not sure who to contact or for any emergency always contact: idil-team@umontpellier.fr

Follow us on:



Useful Ressources

IDIL Website

https://idil.edu.umontpellier.fr/

Find detailed information about our different Master's tracks, descriptions of the IDIL modules for you to personalize your studies, internship opportunities to do during your Master's experience, and PhD applications and procedures to continue your academic experience

Check out our News on our Website

IDIL Agenda

Link (here)

Contains the schedule and location of the TTUs and Non-core Modules, the IDIL events, and the IDIL house Cup events.

-Follow the modules to which you are registered:

1. Click on the specific module you want to follow
2. Click on the option copy to my calendar

-Add the whole IDIL AGENDA:

1. Log in to your email account
2. Access the Google Agenda or click on the link above
3. Finally, click on + Google Agenda at the lower right corner of the calendar.

Moodle

Link (here)

Some Non-Core units propose activities of preparation before your first class.
Be sure to visit the platform in case your Non-Core is concerned.
Registration to your Non-Cores courses onto Moodle needs prior registration with the IDIL team.

Saiec

Link (here)

For International students, to prepare in advance for your stay in Montpellier



IDIL SUMMER SCHOOL

Taking place the first week of September, the IDIL Summer School is more than just a welcome week. **It is the beginning of an exciting academic journey filled with personal growth, discovery, and camaraderie.**

From engaging scientific talks to networking opportunities and social gatherings, our program is tailored to acquaint you with the world of research and multidisciplinarity and provide you with valuable insights for your upcoming year.

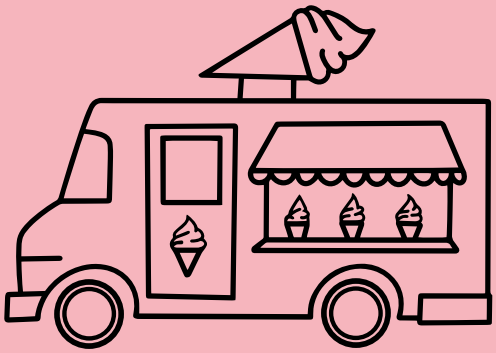
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From Monday to Thursday

Scientific Talks

Conferences in various fields designed to foster intellectual curiosity and multidisciplinarity will be presented from **5 PM**. Join us for a snack at 4:30 PM

For conference timings and topics, please refer to the schedule sent to you by email.



Snack from 4:30 PM

on Wednesday

The Mentor-Student Meeting

Starting at noon with the University President's address and a buffet lunch, during this day you will be able to explore different internship opportunities. You will also meet your future mentor, fellow peers, and other faculty members who could support you throughout your academic journey.

President's address at NOON



Pc: Quentin Thebault

on Friday

The Integration Day

This day is dedicated to addressing administrative queries concerning the IDIL modules and learning about the IDIL House Cup.



Introduction at 10: 30 AM

Gala evening from 6:00 PM

Pc: Quentin Thebault

IDIL Alumni Network

Build your International Network

Be part of our IDIL Alumni network:

Would you like to continue your IDIL journey after your studies? We are currently in the process of setting up an IDIL Alumni Network.

The idea? You will be able to start your career by building an international network based on the IDIL community (current students, future students, previous students, researchers…)





This will be a great place to share work opportunities and career tips, and of course to expand your network!

We will also be inviting you to various events organized by IDIL and the University of Montpellier.

IDIL Ambassadors Program

Become an IDIL Ambassador:

This is an exciting opportunity for students who would like to share their IDIL experience with future students.

By sharing your first-hand experiences, you will be able to help new students make sure they are making the right decision for their studies.

What do you get in return?

By being an IDIL ambassador, you will be able to represent the University at various events (Open Days, Events, and online Webinars).
This is also a great opportunity to add to your CV/LinkedIn and expand your international network

If you are interested in becoming an ambassador for your program or have any ideas for the Alumni network, please contact: Laura.hutton@umontpellier.fr

THE IDIL HOUSE CUP

Meet other IDIL Students

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During your IDIL Master's years, you will have the opportunity to take part in a friendly multidisciplinary competition called the "IDIL House Cup". This annual competition , inspired from the Harry Potter franchise, aims to foster an interdisciplinary spirit in its students by enabling students from different disciplines to get to know and learn from each other. This competition is not compulsory and students can invest as much time as they wish.

This competition has 4 main objectives:

1. **To promote links between students from different IDIL tracks**
2. **To prepare students to carry out a multidisciplinary collaborative project in M2**
3. **To create an IDIL community spirit**
4. **To promote student well-being**



At the start of the year, IDIL M1 students are randomly assigned to one of the three houses, in which they will be able to meet their team members, which will be fellow students from other IDIL courses.

These multidisciplinary "houses" originated from the 1st generation of IDIL students who co-designed their emblems and names with the IDIL administrative team.

You are now probably wondering what your reward will be for taking part?

Well, in addition to an amazing hand carved Trophee, the reward for the house that has gathered the most points during the academic year is a special activity (*in 2023-2024: students were awarded the exciting opportunity to take part in a scuba diving initiation*).

In order to win points for your house, you will have 3 differents options:

- **Obtain points through winning events organized by IDIL.** IDIL events are sessions of sports or cultural activities held approximately every three months. Throughout the academic year (September-June), it is possible to plan 4-5 IDIL events, including a closing event where the Trophy is awarded to the champion's of the winning house at the end of the year.
- **Obtain points according to the number of participants** from each house that take part in IDIL events.
- **Obtain points through the completion of monthly "team challenges"** for each house. These can be found in the highlighted stories on our Instagram account (challenges focusing on positive, ecological, sporty, social, or simply fun themes).

We will keep you updated regarding all upcoming IDIL events via email. Please remember that you must register individually for each event via a Microsoft form. This is to adjust the event size according to the number of participants. Events are typically scheduled in the evenings, weekends, or in school holidays to maximize potential participation and minimize scheduling conflicts.



Pc: Quentin Thebault

House Symbols and goodies:

We will be providing you with colorful sweatshirts and scarves, which will bear the IDIL Graduate Program logo as well as the emblem of your house.

The above will serve as a "house uniform" which will easily distinguish you from other houses during events. If you happen to forget your uniform, don't worry, bring a simple garment or recognizable item in your house color.

Student Involvement in the IDIL House Cup decision-making process:

To ensure the success of this competition, we would like to encourage you to join us in organizing the IDIL House Cup activities. Any ideas are more than welcome, as we want to continue the IDIL House Cup journey together! Frequent "IDIL Meetings" between Quentin, the IDIL coordinator of the competition will be organized. This will be your chance to have your say in exciting future events!

Note: This non-mandatory competition is intended to foster teamwork among participants. We are counting on you all to attend the events with a positive attitude, points will be deducted if the spirit of the competition is not respected.

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Master 1 Students

During your first semester, you will attend different types of courses: [1] Core-Disciplinary courses, [2] IN-LAB Modules, [3] Non-Core modules, and [4] Transversal Training Units or TTUs. The semester finishes in December with the evaluation of all the courses (20 ECTS). For your [5] Personal project (10 ECTS), you will write a report and carry out an oral defence (in December or early January) under the supervision of your tutor and mentor.

In your second semester (S2), you will be able to conduct a research project, participate in the life of a laboratory, and strengthen your disciplinary knowledge through your internship with the help of your mentor and tutor.

M1





MASTER 1

TEACHING UNITS

20 ECTS

- ▸ CORE UNITS
- ▸ NON CORE UNITS
- ▸ TRANSVERSAL UNITS
- ▸ IN-LAB

PERSONAL PROJECT

10 ECTS

of a personal research project

RESEARCH INTERNSHIP

30 ECTS

- **Conducting** a research project
- **Participate** in the life of a laboratory
- **Strengthen** your disciplinary knowledge

To start your first semester on the right foot, check the boxes ✅ when done

- ☐ Along with your tutor, define your learning objectives (including the core units) from the very beginning. Make sure you also discuss this with your mentor. Communicate with them for regular feedback as you complete your Personal Project.
- ☐ Enroll promptly in the Non-core Modules and the TTUs with the IDIL-Team. You will receive an email right after the Summer School with further instructions. **Keep the deadline in mind.**
- ☐ Stay informed about the in-lab details (schedules and assignments)
- ☐ Find your internship and follow all the administrative procedures (with the IDIL-Team) required before the end of the S1 by establishing an internship agreement.

QAM1PPRJ

Personal Project

10 ECTS

Your Personal Project will allow you to delve into your discipline with guidance from a tutor and a mentor.

Learning Outcomes

- Conducting systematic literature searches.
- Critically reading scientific peer-reviewed literature.
- Identifying research gaps and defining a focus area.
- Supporting arguments with proper in-text referencing.
- Differentiating between quantitative and qualitative research.
- Using digital tools for referencing (e.g., Endnote, Zotero, Mendeley).
- Applying discipline-specific formatting styles (e.g., APA).
- Designing effective visual data representations (charts, mind-maps, diagrams, graphical abstracts).
- Presenting projects effectively with both verbal and non-verbal communication skills.
- Utilizing basic project management tools, such as a backward planning approach.



Personal Project

Assessment

Each disciplinary track have specific assessment criteria, but all Personal Projects consist of a written report and an oral presentation

Written Report

The written assignment may vary from one disciplinary track to another, but it generally includes:

- **Literature Review** summarizing the state of the art relevant to the research project you will carry out during your internship.
- The formulation of testable R**esearch Hypotheses**

Note: The Literature Review will cover more ground than your internship report because it has to allow you to situate your research topic and questions within your entire discipline.

Oral Presentation

You will be able to defend your Project in front of a jury at the end of the first semester.

Check with the Head of your Master requirements for timing, visual support formatting, and any other assessment criteria.

Tip: Always have a backup plan in case of Technology Hiccups.

Jury

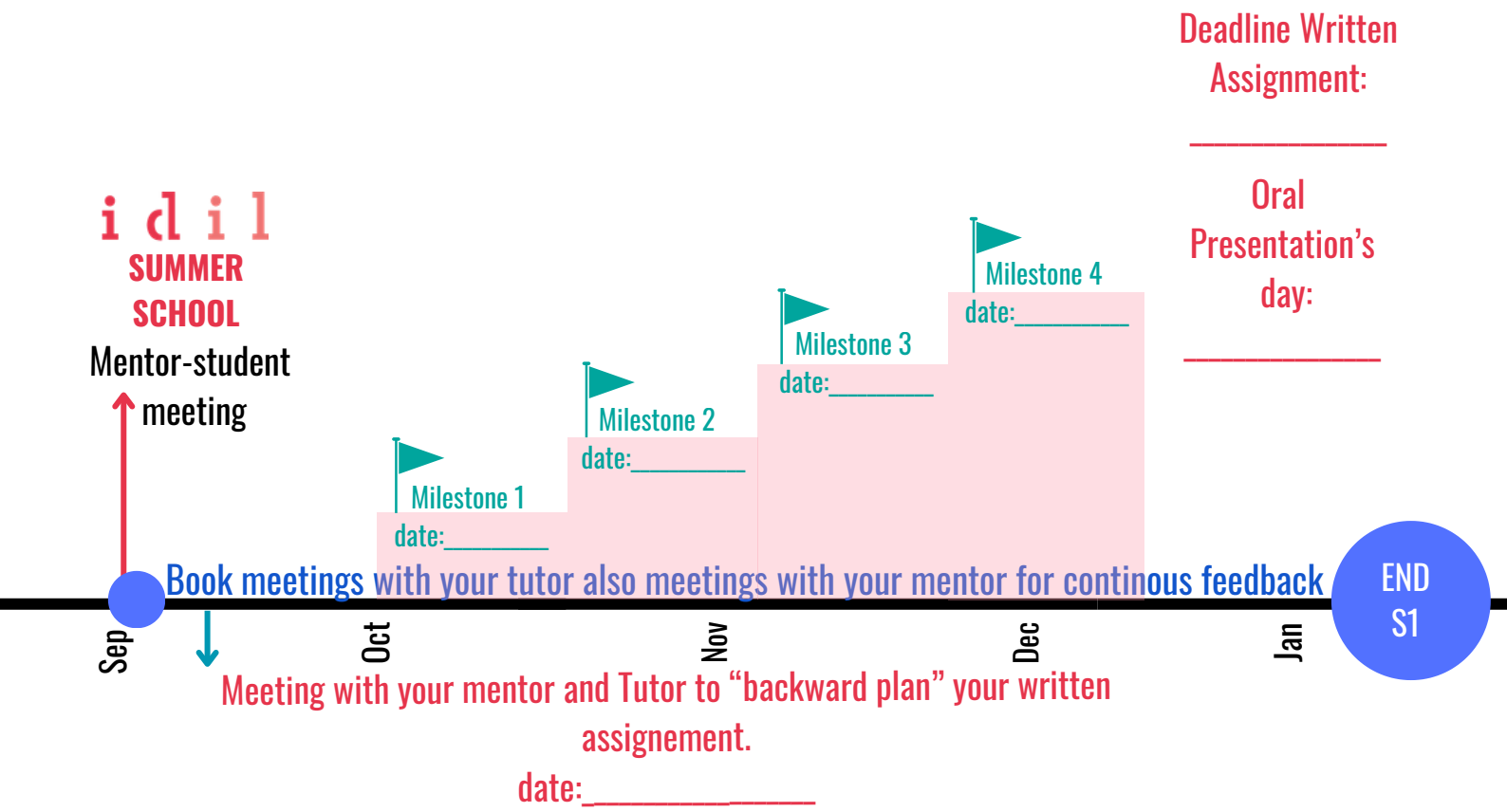
The jury evaluating your Personal Project typically includes:

- Your tutor.
- Your mentor.
- Additional members appointed by the head of your Master's track program.



Backward Planning PP

Visualizing your Personal Project completed will help you identify the truly necessary milestones to reach your goal



Note: Keep in mind that tutors and mentors have calendars of their own that you should consider.

Backward Planning PP

Check the boxes ✅ when done

- ☐ Schedule a first meeting with your tutor and mentor to talk about this module and your future project (the methodology of the course, the assessment criteria, your learning objectives and project goals, possible project milestones, and the deadlines).

- ☐ Be aware of these ultimate deadlines

  Written submission: _____

  Date of the Presentation: _____

- ☐ Along with your tutor and mentor, define the principal milestones you should go through to complete your project and be sure to receive continuous feedback. For instance,

  - Milestone 1: Definition of your general theme and research question
  - Milestone 2: Synthesization of the concepts/results for your state-of-the-art
  - Milestone 3: Definition of some hypotheses you will test during your internship in semester 2
  - Milestone 4: Identification of the methods you will apply and the expected results during your internship in semester 2

- ☐ Define the different chapters that your written assignment will contain. Reflect on the dependencies to complete the sections and anticipate the challenges you may encounter. Consider when you need to set a meeting with your Mentor or Tutor for extra help with the different tasks. Feel free to adapt the following model to your Personal Project.

TASK	Dependencies/Challenges	
Area of focus	-Meeting with mentor and Tutor to identify the area of focus	
Literature Review	-Defining the general theme and research question. -Effective techniques to find reliable literature	
State-of-the-art and research questions	-Reading and understanding of scientific peer-reviewed literature -Analyzing academic writing codes in your discipline and your statements with citations.	
Hypotheses	-Linking the state of the art to the research questions of your internship (the research questions in your mentor's team) -Identify possible challenges and risks	
Methodology	-Designing a research study that adheres to ethical approaches. -Defining proper research methods and possible data collection techniques	
Bibliography	-Checking you inserted all the citations to justify your state-of-the-art -Checking the homogeneity of your reference list at the end of the document: Endnote, Zotero, Mendeley, etc	
Visual supports for the defense	-Knowledge of how to properly design the different visual supports to represent scientific data	
Presentation Preparation	-How to build a scientific presentation based on slides -Rehearsal Time	

Help from your tutor	Help from your mentor	Status and Comments

Research Internship in M1

30 ECTS



For most IDIL Masters, the second semester includes an internship at a research institute. During this time, you will be supervised by your mentor, whom you met at the summer school.

How to prepare it?

1. Write your Personal Project.
Detail the main topics you will study at the host research institute.

2. Draft an Internship Agreement.
It will serve as the contract between you, the research institute, and IDIL.

In October, you will receive detailed instructions on how to complete this agreement, with assistance from an IDIL administrative officer. Ensure you follow this procedure carefully.

If you need to travel to different regions or countries during your internship, **contact the IDIL administrative officer to include this information in your internship agreement.**

- For travel to high-risk countries, you should complete the Fonctionnaire Sécurité Défense (FSD) procedure and provide the necessary forms.

Completing these forms ensures you are registered, and receive appropriate coverage and support. This step is crucial for your safety and compliance with institutional regulations.



Assessment

At the end of your internship, you will be graded on two parts :

- **A written report also called "*mémoire de stage*".**

The head of your Master's track will specify the academic elements required, for example, page numbers and expectations

- **An oral presentation to defend your report** based on several questions asked by a jury.

Your mentor, tutor, and head of your Master's track will be part of the members of your jury.

Allowance

For your first YEAR studying an IDIL Master's track (in IDIL ONLY), this internship is subsidized by IDIL.

In addition, 800 euros will be transferred to the laboratory of your internship to support your running costs.


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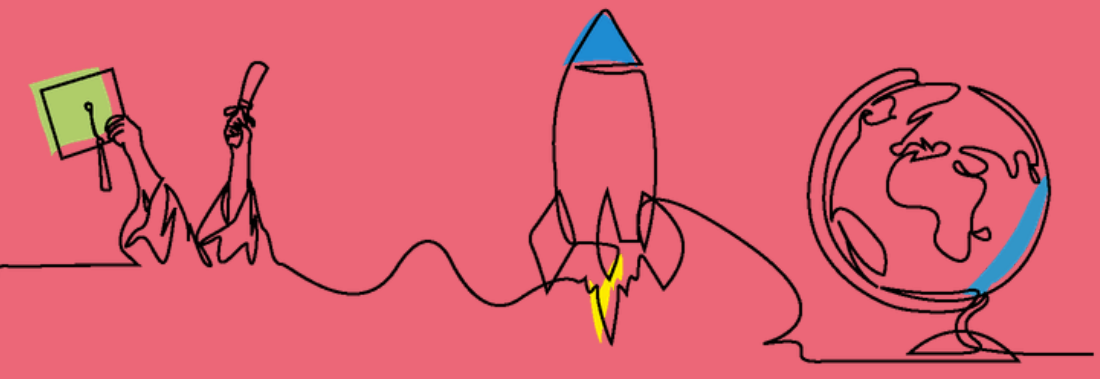
Pc: Quentin Thebault

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Welcome to your Second Year!

Similarly to your first year in the IDIL Graduate Program, during your first semester of year 2, you will study (1) Core discipline courses, (2) Non-Core modules, and (3) Transversal Teaching Units or TTUs, all totaling 20 ECTS. In addition to these, you will complete a (5) Multidisciplinary Project (equating to 10 ECTS), for a total of 30 ECTS. The semester will end with the assessment of the modules and the submission of the multidisciplinary project as a written assignment in December. Furthermore, you will present the latter briefly during the IDIL Interdisciplinary Day in January

Your second semester will be dedicated to your research immersion. Enjoy your academic year!



M2

MASTER 2



TEACHING UNITS

20 ECTS

- ▸ CORE UNITS
- ▸ NON CORE UNITS
- ▸ TRANSVERSAL UNITS

MULTI-DISCIPLINARY PROJECT

10 ECTS

Group project:

Students from different IDIL master's programs carry out multidisciplinary project

Find out more

RESEARCH INTERNSHIP

30 ECTS

- **Conducting** a research project
- **Participate** in the life of a laboratory
- **Strengthen** your disciplinary knowledge

To start your first semester on the right foot, check the boxes ✅ when done

- ☐ Define your learning objectives from the very beginning. Communicate with your mentor for regular feedback and support. You can also contact your mentor for disciplinary doubts when developing your Multidisciplinary Project.
- ☐ Enroll promptly in the Non-core Modules and the TTUs with the IDIL-Team. You will receive an email right after the Summer School with further instructions. ***Keep the deadline in mind.***
- ☐ In case you decide not to continue with the same internship location (research institute and or team) as during your first year, or in case you started your IDIL experience in M2, you will need to find your internship and complete all of the administrative procedures required before the end of the S1.
- ☐ Be prepared for your Multidisciplinary Project as **it counts for one-third of your semester.**

QAM2MUTP
Multidisciplinary Project

10 ECTS

Multidisciplinary research represents significant opportunities to address complex challenges in contemporary society by leveraging expertise from various disciplines. This Module is designed to equip you, IDIL students from different disciplinary tracks, with the skills to build interdisciplinary research proposals.

In this module, you will consolidate your disciplinary knowledge and gain foundational insights from other disciplines, including their research methods. By working on interdisciplinary research project proposals, you will create synergies and enhance your abilities in project development, communication, fundamental research, and other essential soft skills.



Learning Outcomes

- Recognize and apply the various stages of the scientific process in their discipline
- **Mobilize your disciplinary knowledge and experience in a multidisciplinary context.**
- Develop effective communication skills and project management skills to work collaboratively with people from other disciplines.
- Develop critical thinking based on evidence from different disciplines.
- Participate in the synthesis of data from research projects in a Multidisciplinary context.

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Multidisciplinary Project

SUPPORT



1. From your Multidisciplinary Project advisor
2. From all the mentors of the members of your group

ASSESSMENT

1. The state-of-the-art and a graphical abstract of your project (30%)
2. Project organization and participation (10%)
3. Full Project: letter of Intent (60%)



PRESENTATION

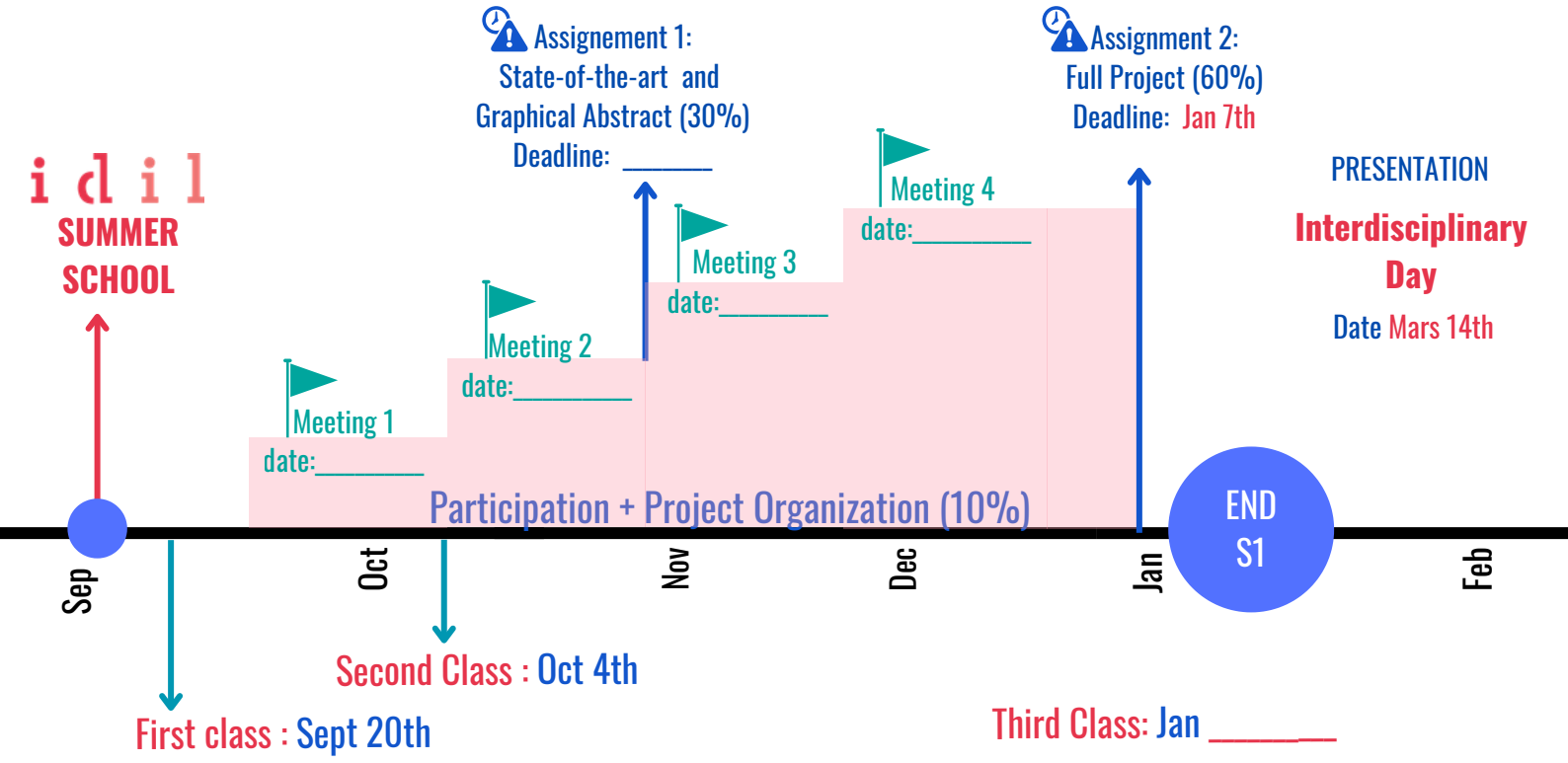


Present your project in a TedX style during our

INTERDISCIPLINARY DAY

Backward Planning MP

Visualizing your Multidisciplinary Project completed will help you identify the truly necessary milestones to reach your goal



**Note: Book regular meetings with your different mentors for disciplinary questions.*

Backward Planning MP

Check the boxes ✅ when done

- [ ] Attend the **First Plenary Session** in which you will:
  - [ ] 1. Discover the methodology of the course.
  - [ ] 2. Meet your team and your Multidisciplinary Project advisor.
  - [ ] 3. Choose a general topic for your Multidisciplinary Project.
  - [ ] 4. Define communication and collaboration tools. For example, social media or a project management app: Click-up, Monday…
  - [ ] 5. Add the **mandatory dates** for the Multidisciplinary Project to your agenda (Assignments' deadlines, plenary sessions, and the Interdisciplinary Day).
  - [ ] 6. **Check the template on pages 36 and 37**. Identify the dependencies you may encounter in each of the steps and anticipate the challenges to be able to move to the next one.
  - [ ] 7. Predict important dates for the group (meetings with the advisors, possible meetings with the mentors, and so on) and define the ones you already can.
  - [ ] 8. Identify the column **"Responsibilities of each member"**. Please adapt and fill in this column **in groups** periodically and discuss your conclusions with your advisor during the different meetings.

To fill this column, you should be able to give some examples of how each of the members contributed to each task, assessing 4 items: (1) Disciplinary contribution, (2) Group communication and work, (3) Information synthesis, and (4) Project Management Skills

The Multidisciplinary Project advisor will support your group to reach the principal milestones. To do so, you will have at least 4 meetings as it follows

- Meeting 1: To explain in 10 minutes the general theme and present the multidisciplinary question
- Meeting 2: To present the concepts/results of 5 articles in each discipline that will be included in your state-of-the-art
- Meeting 3: To present the research hypotheses in each of the disciplines and their interconnections
- Meeting 4: To present the materials and methods in each discipline

- [ ] Attend the **Second plenary Session** about Research in Social Sciences

- [ ] Participate in the **Third Plenary Session** in order to clarify your doubts regarding the presentation for the Interdisciplinary Day

	TASK	Dependencies, needs, and challenges	Duration
Meeting 1	Area of focus	-Choose a multidisciplinary research theme -Identify effective techniques to find reliable literature in different disciplines	
	Literature Review	-Read and understand scientific peer-reviewed literature. -Analyze academic writing codes in your discipline to mobilize them in a multidisciplinary research proposal. -Justify your statements with citations.	
Meeting 2	State-of-the-art and research questions	-Establish your group's multidisciplinary research questions and hypotheses. -Establish your disciplinary research question inside the multidisciplinary research project	
	Graphical Abstract	-Co-construct and propose a visual abstract of that present the state of the art and the questions of your multidiciplinary research project **NOT** the methods	
	Methodology	-Link the state of the art to the research questions defined. -Define proper research methods and possible data collection techniques. -Design a research study that adheres to ethical approaches.	
Meeting 3	Hypothesis and risks	-Link the state-of-the-art to the research questions of your project and Methodology to identify possible challenges and risks	
	Bibliography	-Check that you inserted properly all the citations to justify the state-of-the-art of your project. -Check the homogeneity of your reference list at the end of the document-Tools: Zotero (to be checked)	
Meeting 4	Presentation Preparation	-Prepare a scientific presentation based on the challenge proposed for the Interdisciplinary Day -Rehearse several times	

Advisor's intervention (+date)	Mentor's intervention (+date)	Responsibilities of each member	Status and comments

Assignement 1: (30%)
Deadline: _____

Assignement 2: (60%)
Deadline: _____

Research Internship in M2

30 ECTS



For most IDIL Masters, the second semester includes an internship at a research institute. During this time, you will be supervised by your mentor, whom you met at the summer school.

How to prepare it?

1. Work with your mentor to develop your project.
Your mentor will typically be the same as in your first year..

2. Draft an Internship Agreement.
It will serve as the contract between you, the research institute, and IDIL.

Important: The procedure for your second internship is different from the first. Do not submit the same documents as last year.

If you need to travel to different regions or countries during your internship, **contact the IDIL administrative officer to include this information in your internship agreement.**

- For travel to high-risk countries, you should complete the Fonctionnaire Sécurité Défense (FSD) procedure and provide the necessary forms.

Completing these forms ensures you are registered, and receive appropriate coverage and support. This step is crucial for your safety and compliance with institutional regulations.



Assessment

At the end of your internship, you will be graded on two parts :

- **A written report called "*mémoire de stage*".**

The head of your Master's track will specify the academic elements required, for example, page numbers and expectations

- **An oral presentation to defend your *mémoire*** based on several questions asked by a jury.

Your mentor, tutor, and head of your Master's track will be part of the members of your jury.

Allowance

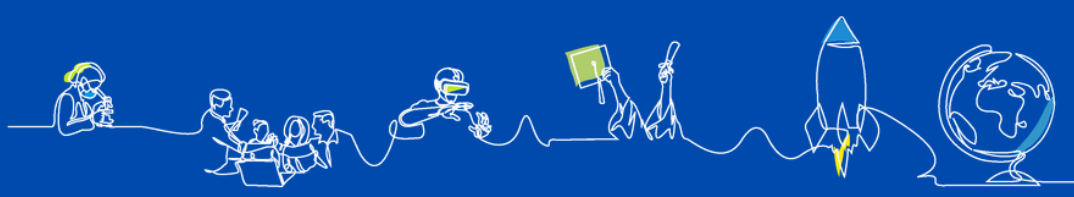
Please be advised **that IDIL will not provide any financial assistance or transfers** to support your research institute or cover expenses for your second internship.

To arrange funding, please contact the Human Resources department of your laboratory or research institute to confirm which organization may provide financial assistance for your internship.

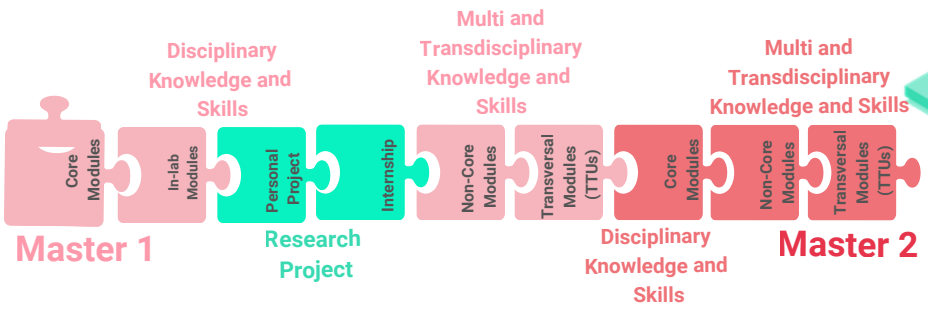


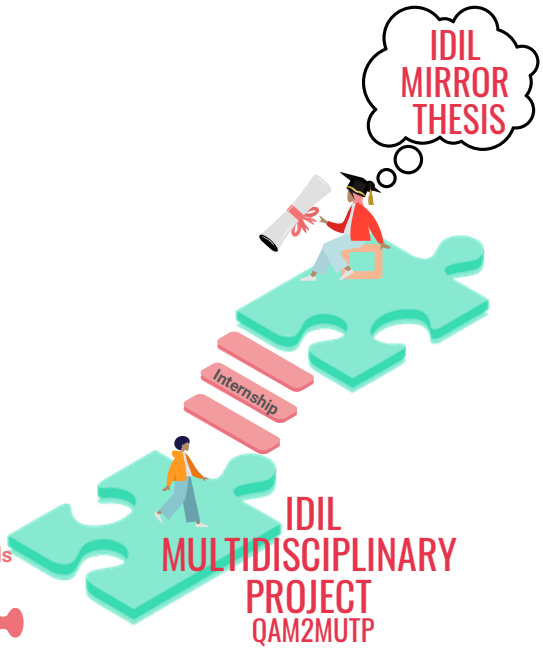
Personalizing your Idil Experience

Non-core Training Units | Transversal Training Units

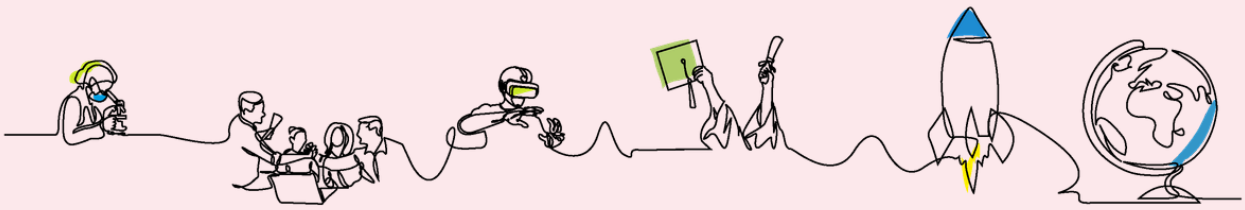


These mandatory training units are an integral part of the IDIL curriculum and are designed to complement your core courses by broadening your knowledge and strengthening skills beyond your main field of study. Together, they enrich your IDIL experience and provide you with a broader set of knowledge and skills to support your future goals.







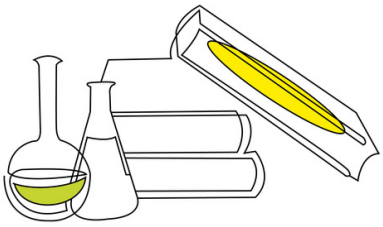


The Non-core Training Units

As part of your interdisciplinary journey within the IDIL Master's Program, Non-Core Training Units invite you to step outside your usual academic field and discover new disciplines, approaches, and ways of investigating scientific and societal questions. **Non-Core Training Units should be chosen outside your main discipline:** their purpose is to broaden your perspective, expose you to unfamiliar research practices, and complement the expertise you are developing within your Master's track. No prior knowledge of the field is expected—curiosity and openness to new ways of thinking are all you need.

Each Non-Core Training Unit is worth 2 ECTS and involves approximately 12 to 16 hours of teaching and learning activities. Because each discipline has its own practices, the learning experience can vary considerably from one course to another, with different teaching methods, activities, and assessment formats. You may take part in laboratory work, field observations, collaborative projects, debates, discussions, or other hands-on activities, depending on the course.

Before choosing a Non-Core, check the schedule carefully to make sure you can attend its sessions. Finding time slots that work for everyone is challenging, so your active participation is important—not only for your own learning, but also for the smooth running of activities and the learning experience of your classmates. Some sessions may be assessed and therefore require your presence. If you know that you will be unable to attend a session, contact the course instructor as early as possible and, in particular, make sure you do not miss any assessed sessions.



Explore your Non-core Options

The following pages describe each available Non-Core, including its objectives, content, teaching format, and assessment methods, to help you choose the course that best matches your interests and goals.

Browse the different options and discover what each one has to offer. Otherwise, simply click on the name of your selected Non-Core to learn more about it. Once you have chosen your Non-Core, read all the information carefully and then proceed to the Enrollment Process to complete your registration.

- Basic Principles of Sustainable Management
- Biology By the Numbers: Measure, Predict, and Design
- Challenges in Chemistry for Health & Environment
- Defusing Quantitative Bullshit
- Economic Insights into Sustainable Development **NEW**
- Explore, Understand, and Learn: An Outdoor Journey in Sustainability
- In-Motion: How the way we move reveals who we are
- Innovations for Personalized Medicine
- Mediterranean Ecosystems
- One Health: Parasites, the Kings of the Living World
- Plastic, the invisible menace **NEW**
- Scientific Openness to Earth and Water Issues under Global Change
- Shaping the Future of Agriculture **NEW**
- The Bionic Man
- The Chemistry of Beer, Wine, and Culinary Arts
- Who's Afraid of AI?
- Why Democracy is Hard



Basic Principles of Sustainable Management

Integrating sustainability into business models is a major challenge for organizations seeking to create long-term value while meeting growing stakeholder expectations.
This requires companies to balance economic performance with social responsibility and environmental considerations. Organizations must also navigate increasingly complex regulatory, societal, and environmental challenges. This module explores how sustainability can be integrated into business strategies, operations, and decision-making.
It focuses on two key questions:

- How can companies align diverse stakeholder interests while maintaining performance?
- How can they balance the economic, social, and environmental dimensions of sustainable development?

Chapter 1: Performance, CSR/SD - reporting
Chapter 2: Strategic vs operational challenges
Chapter 3: Environmental Challenges
Chapter 4: Organizational management and social issues

	Description
You will learn to	• Identify the main sustainability challenges facing businesses. • Compare corporate sustainability strategies and practices. • Distinguish between financial performance and overall organizational performance. • Analyze the environmental and social impacts of business activities. • Defend and communicate informed viewpoints on sustainable development in a public debate.
How you will learn it	• Thematic Sessions, discussions and a Public Debate
How you will be assessed	• Flipped Workshop • Oral Participation • Participation in the Final Debate

Teachers: Jean- Marie Courrent
Géraldine Giordano
Anne Mione
Anne-Sophie Fernandez
Claire Gillet-Monjarret

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Tolotra Andriatsiory
Comparative Politics, M1 2025

"One of the main insights I gained from this course was a better understanding of the mechanisms of CRPD and their role in sustainable management. I also developed a clearer appreciation of the purpose of sustainable management and the importance of balancing different perspectives when addressing complex challenges. Finally, the course helped me improve my public speaking skills and showed me how to engage an audience by encouraging discussion and debate."



Biology by the Numbers: Measure, Predict, and Design

New ‘quantitative’ approaches are needed in modern biology, with the change of perspective from a mainly descriptive field to something else.

The aim of this course is to provide tools and mindset for answering the questions in ‘modern’ Biology, arising from the rather recent technological advancements and new generation (large-scale or high resolution) data.
These tools are forcefully not monodisciplinary and involve integrating expertise from many different fields. We provide concrete and tangible examples from everyday situations that include state-of-the-art experimental techniques and theoretical approaches to rationalise them.

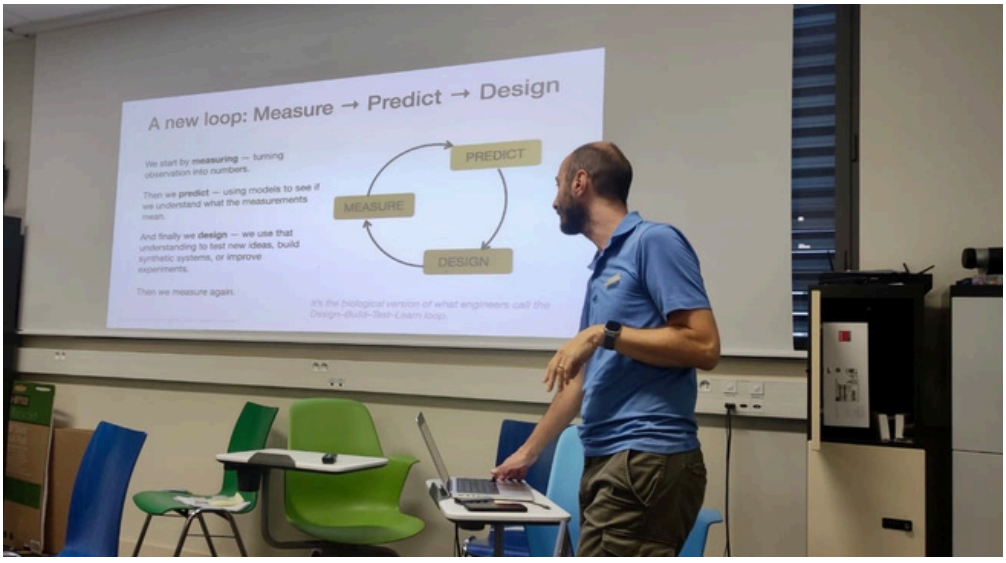
Chapter 1: Value of Numbers in Biology.
Chapter 2: Data analysis and hypotheses
Chapter 3: Defining a Model and Modeling Tools
Chapter 4: Feasibility of Modeling and the parameters to take into account

	Description
You will learn to	• Critically evaluate the outcomes of different measurement strategies. • Explain the role of hypotheses in data analysis and modeling approaches. • Assess the relevance of predictive modeling for understanding and designing new biological systems.
How you will learn it	• Thematic sessions, video analysis, group discussions, and hands-on activities
How you will be assessed	• Mini Project • Participation during the different sessions • Final Presentation linking the measure/prediction/design

Teachers: Luca Ciandrini
Cherine Bechara
Gaetan Bello
Alexis Courbet

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Joël Singer
Digimove, M1 2025

"One of the main insights I gained from this course was the importance of being critical about the data we use at every step of its processing, always putting it into perspective instead of robotically applying one transformation after another. I also realized that models do not necessarily have to be complex; we create and use them regularly, often without even noticing it. Finally, I found the fields of protein design and DNA origami particularly fascinating, especially because they illustrate how computational approaches can help us better understand and design biological systems. I particularly appreciated the opportunity to meet researchers working in these fields."

Challenges in Chemistry for Health and the Environment



Chemistry is at the heart of medicine development and plays a key role in addressing major health and environmental challenges. Understanding how chemical compounds are designed, transformed into medicines, and evaluated is essential to assess their benefits, limitations, and impacts on society. This course explores the complex relationship between chemistry, healthcare, and sustainability, highlighting the need to balance therapeutic innovation with safety, accessibility, economic considerations, and environmental responsibility. It provides students with a multidisciplinary perspective on the challenges faced by modern pharmaceutical science.

Chapter 1: Pharmaceutical forms
Chapter 2: Counterfeit drugs and pharmaceuticals, a major issue
Chapter 3: Environmental impact of drugs
Chapter 4: International issues of pharmacoeconomics
Chapter 5: Comparative evolution of requirements for marketing a medical product worldwide

	Description
You will learn to	• Explain the role of medicines in society, integrating scientific, economic, regulatory, and environmental dimensions. • Describe the main pharmaceutical dosage forms and their implications for drug use and effectiveness. • Analyze the issues related to counterfeit medicines and their impact on public health. • Understand the principles of pharmacoeconomics and international differences in drug access and regulation.
How you will learn it	• Lectures, videos and discussions with guest speakers
How you will be assessed	• Document analysis

Teachers: Virginie Rage-Andrieu
Laurianne Simon
Helene Fenet
Geraldine Leguelinel
Baptiste Robin

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Kamil Benamara
Sciences for Human Health, M2 2025

"My main takeaway from this course was understanding the importance of regulation — including legal and economic perspectives — and its impact on the environment and human health."







Jinwei Zhang
Digimove, M1 2025

"My three main takeaways from this non-core were: (1) understanding that many chemicals beneficial for human health can also have negative impacts on the environment, (2) recognizing the need to make chemical manufacturing cleaner and more resource-efficient, and (3) discovering the major legal challenges related to the use and regulation of chemicals."





Defusing Quantitative Bullshit

This course aims to help students navigate the bullshit-rich modern environment by identifying bullshit, seeing through it, and combating it with effective analysis and argument.

Bullshit involves language, statistical figures, data graphics, and other forms of presentation intended to persuade by impressing and overwhelming a reader or listener, with a blatant disregard for truth and logical coherence. Calling bullshit is a performative utterance in which one publicly repudiates something objectionable.

Chapter 1: Definition of Bullshit
Chapter 2: Fermi Estimates, Propositional Calculus, Bayes's Rule
Chapter 3: Association, correlation, causation
Chapter 4: How to make a scientific poster
Chapter 5: Practical Session

	Description
You will learn to	• Identify and critically evaluate misleading claims, arguments, and representations of information in scientific and public communication. • Analyze quantitative information, including statistics, figures, and graphs, to detect errors, biases, and unsupported conclusions. • Apply basic reasoning tools, probability concepts, and causal thinking to assess the reliability of claims and evidence. • Differentiate correlation from causation and evaluate the strength of scientific arguments. • Communicate evidence-based conclusions effectively through clear scientific argumentation and visual presentation.
How you will learn it	• Thematic Sessions and Workshops
How you will be assessed	• Poster creation and presentation



Teacher: Benoîte de Saporta
Nils Ole Walliser
Andrea Parmeggiani

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Victor Salvat
Digimove, M1 2025

“My main takeaways were understanding the difference between statistics, correlation, and causation, recognizing the importance of clear and accurate data visualization, and developing critical thinking skills to better analyze and question information.”





Economic Insights into Sustainable development

How can economics help us understand and address today's most pressing sustainability challenges? This course provides an overview of sustainable development through four major topics. The first module explores Artificial Intelligence and how it transforms innovation processes while raising major societal challenges. The second module analyses how changes in the architecture of global value chains and foreign direct investments shape prospects for inclusive development. The third module examines the challenges faced by health systems focusing on health inequalities and access to care. The fourth module investigates the issues surrounding universal access to energy, with particular attention to rural-urban disparities in sub-Saharan Africa.

Chapter 1: Innovation and Artificial Intelligence
Chapter 2: FDI and Global Value Chains in a Changing World: Towards Sustainable, Inclusive, and Resilient Development
Chapter 3: Health Inequalities and Access to Care
Chapter 4: Sustainable Energy for All

	Description
You will learn to	• Critically assess the opportunities, risks, and societal challenges associated with the diffusion of Artificial Intelligence. • Analyze the role of Foreign Direct Investment (FDI) and Global Value Chains (GVCs) in promoting sustainable, inclusive, and resilient development • Analyze the key concepts, theoretical frameworks, and health policies related to health inequalities and equity in access to care. • Analyze the key concepts and factors influencing health inequalities and equity in access to care.
How you will learn it	• Thematic Sessions and discussions
How you will be assessed	• Written Report

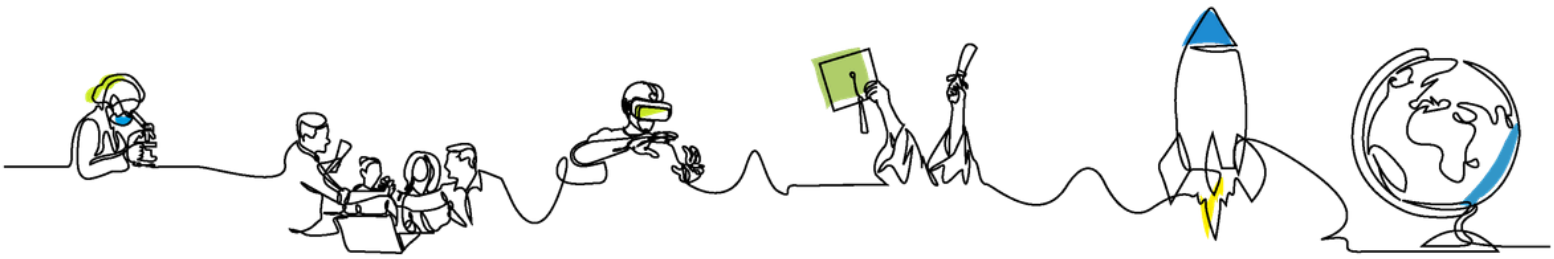


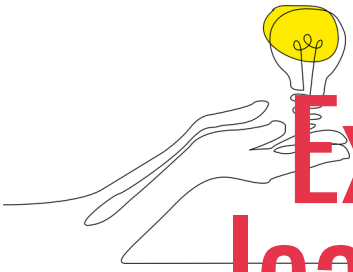
Teacher: Sandrine Michel
Marlène Guillon
Damien Bricard
Sofia Patsali
Pauline Lectard

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UNIVERSITÉ DE MONTPELLIER

Available from September 2026





Explore, understand, and learn: An Outdoor Journey in Sustainability

Sustainability challenges can only be understood by connecting scientific knowledge with real-world contexts. In this module, you will explore the fundamental principles of sustainable development through the study of a local ecosystem, gaining a multidisciplinary perspective on environmental, social, and economic issues. By linking local challenges to global sustainability goals, you will develop systems thinking, critical analysis, and an understanding of resilience. You will learn how sustainability principles can be applied to complex socio-ecological systems and develop the knowledge needed to assess sustainability challenges across different scales and contexts.

Chapter 1: Introduction: Sustainability Principles and SDGs.
Chapter 2: Transdisciplinarity, Sustainability, and Resilience
Chapter 3: Applied Sustainability Principles
Chapter 4: Sustainability in Herault Region

	Description
You will learn to	• Deepen understanding of sustainability through real-world exploration and field observations. • Develop cross-disciplinary and intercultural collaboration skills in addressing sustainability challenges. • Use digital tools to link Field data with theoretical sustainability concepts. • Critically analyze and propose disciplinary perspective for real sustainability issues, considering global and local contexts.
How you will learn it	• Thematic Sessions, a Fieldtrip, and a Meeting with the stakeholders.
How you will be assessed	• Question Design and Pitch



Teacher: Valérie Borrel
Vanessa Vigano

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Théo Mangoni
Eco-epidemiology of emerging diseases, M2 2025

"My main takeaways were developing a deeper and more nuanced understanding of what sustainability means, how it can be defined and applied across different domains, and how the Sustainable Development Goals provide a framework for addressing global challenges. The course helped me move beyond the simplified definitions of sustainability I had previously encountered and understand how it can take different forms depending on the context and field of application. I also learned how to formulate meaningful sustainability questions and approach complex environmental and societal issues from different perspectives."



Paul Kimani Maina
Earth Under Global Change, M1 2025



"The key insights I gained from this course were that sustainability challenges are interconnected and require a global and multidisciplinary perspective. I learned that transdisciplinary approaches are essential to address complex sustainability issues, and that the Sustainable Development Goals provide a common framework to guide action and collaboration."



Pariphat Promduangsri
Water Under Global Change, M2 2025

"The key insights I gained from this course were that the Sustainable Development Goals are closely connected to our everyday lives and affect everyone, including within our own fields of study. I discovered new sustainability perspectives related to my faculty and learned the importance of considering different viewpoints, such as risk management approaches shared by external experts."



In-Motion: How the Way We Move Reveals Who We Are

Movement is a fundamental expression of human experience, revealing how we think, feel, interact, and adapt to the world around us. This course explores the idea that movement is more than a physical action: it is a reflection of our identity, emotions, abilities, and social relationships. By connecting perspectives from neuroscience, psychology, cognitive science, and human behavior, the course provides a deeper understanding of how movement shapes and communicates who we are. You will discover how individual movement patterns are influenced by biology, experience, culture, and environment. Understanding movement as a dynamic human signature offers valuable insights into health, communication, creativity, and social interaction.

Chapter 1: Introduction
Chapter 2: Mental and Physical Health
Chapter 3: Movement and Identity
Chapter 4: Emotional Expression in Motion
Chapter 5: In-motion into the Wild

	Description
You will learn to	• Explain how human movement reflects identity, intentions, emotions, and individual characteristics through concepts from movement science and embodied cognition. • Analyze movement patterns and interpret how biological, psychological, and social factors influence human behavior. • Evaluate how movement expression varies across cultural and contextual environments. • Communicate insights about movement and human behavior using scientific and interdisciplinary perspectives
How you will learn it	• Thematic sessions, an "Into the Wild" session, poster presentation, and a debate.
How you will be assessed	• Scientific Poster (written and oral assessment)

Teacher: Benoît Bardy

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By clicking here



Amélie Janin
Management and Sustainable Transition, M2 2025

"The key insights I gained from this course were understanding how certain behaviors can be linked to physical or mental conditions, recognizing that movement and expression can reveal aspects of an individual's characteristics, and developing a better ability to interpret emotions through body movements, even when they are intentionally concealed."







Gaëlle Gonnet
Water Under Global Change, M1 2025



"What I found most valuable in this course was gaining the vocabulary and concepts to better understand behaviors and attitudes I had already observed, confirming some of my intuitions about how people express themselves through movement, and discovering the strong connection between movement and mental health."

Innovations for Personalized Medicine

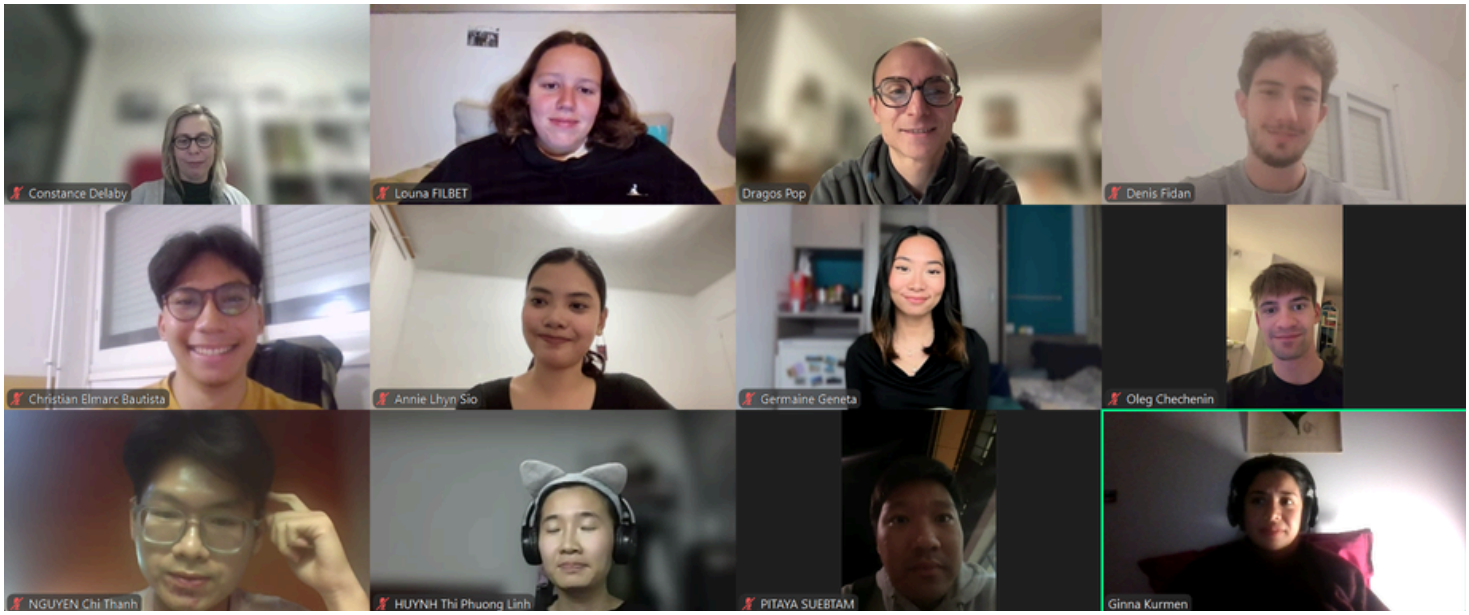
Modern medicine is undergoing rapid transformation through advances in genetics, biotechnology, and artificial intelligence. Understanding these innovations is essential to evaluate their potential, limitations, and impact on healthcare and society. This course provides students with an overview of how emerging technologies are reshaping diagnosis, treatment, and medical decision-making, while addressing the ethical, societal, and scientific challenges they raise. By connecting technological developments with real-world healthcare issues, students will develop a critical perspective on the opportunities and risks associated with the future of medicine.

Chapter 1 Introduction
Chapter 2 Genetic and Disease
Chapter 3 Biotechnology
Chapter 4 Misinformation in Medicine
Chapter 5 AI in Healthcare & Risks

	Description
You will learn to	• Explain the fundamental principles of emerging technologies transforming modern medicine, including genetics, biotechnology, and artificial intelligence. • Analyze how these technologies contribute to advances in disease understanding, diagnosis, and treatment. • Identify and evaluate the potential benefits, limitations, and risks associated with new medical innovations. • Assess the reliability of medical information and recognize the challenges posed by misinformation in healthcare. • Develop and defend balanced arguments by discussing the advantages and disadvantages of emerging technologies in medicine.
How you will learn it	• Laboratory visit at IRMB and different topics debates
How you will be assessed	• Laboratory visit report • Participation in the debates • Final presentation

Teacher: Constance Delaby

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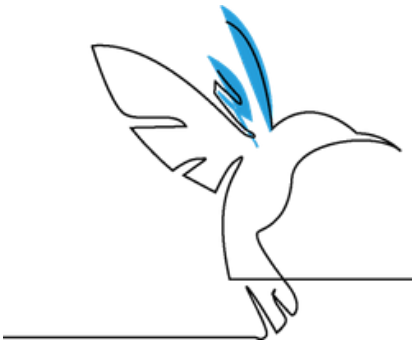
Annie Lhyn Sio
Eco-epidemiology of emerging diseases, M1 2025

"What I found most valuable in this course was learning that medical data must be approached critically and ethically, understanding that scientific information should always be evaluated rather than accepted without questioning, and recognizing the importance of open discussion in developing deeper understanding and confidence.









Mediterranean Ecosystems

Ecology and evolution are essential to understanding how life adapts, interacts, and responds to environmental changes. This course introduces students to the principles that shape biodiversity and ecosystem functioning through the study of Mediterranean ecosystems, which represent complex and highly diverse environments. It explores the relationships between organisms and their environment, the importance of ecosystem health for human well-being, and the ways in which human activities transform natural systems. By connecting ecological and evolutionary perspectives, the course provides a broader understanding of the interactions between biodiversity, environmental challenges, and human societies.

	Description
You will learn to	• Explain the fundamental principles of ecology and evolution and their role in shaping biodiversity. • Analyze species interactions and ecosystem processes to understand how ecosystems function. • Evaluate the links between ecosystem health, biodiversity, and human well-being. • Assess the impacts of human activities on ecosystems and the emergence of socio-ecosystems. • Apply ecological concepts to interpret environmental challenges in Mediterranean and other complex ecosystems.
How you learn it	• Lecture, brainstormings, Field Trip and discussions
How you will be assessed	• Initial oral presentation • Field trip report (written) • Final debate

Teacher: Dr. Emanuel Fronhofer

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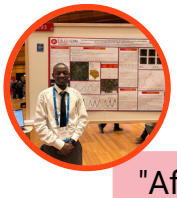






Valentine Fetiveau
Sciences of Human Health, M1 2025

"My three main takeaways from this non-core were: (1) understanding some connections between ecology and cancer biology, (2) realizing the importance of ecosystems, and (3) discovering the beauty and ecological significance of the Camargue."



Ismail Bala Muhammad
Earth and Water Under Global Change, M1 2025

"After this course, I became interested in researching wetlands further, as they act as natural barriers against flooding."





One Health: Parasites, the Kings of the Living World

Many are well hidden in cells, blood vessels, intestines, among hair, feathers, or scales; others camouflage themselves, change to the point where they look like anything but a foreign invader; and others manipulate behaviors and food chains. To exploit the living—their flesh, their labor, their parental care... Parasites and pathogens go unnoticed by everyone as long as they have no negative effect on the organisms that host them. They are both terribly visible when they kill, disable, or weaken their hosts, yet invisible the rest of the time—so much so that we forget their role in the functioning of ecosystems, as selective pressures on biodiversity, and the main threat to human evolution and history. This non-core unit is dedicated to the exploration of parasite diversity, ecological, and evolutionary functions, with an ultimate focus on their effects on our species' biology and History.

Chapter 1: Parasites, the discreet Kings
Chapter 2: Parasites: Discreet but Resourceful Masters - Part 1
Chapter 3: Parasites: Discreet but Resourceful Masters - Part 2
Chapter 4: Homo sapiens, One Vassal Among Many?
Exploring the Role of Pathogens in Human Evolution and History

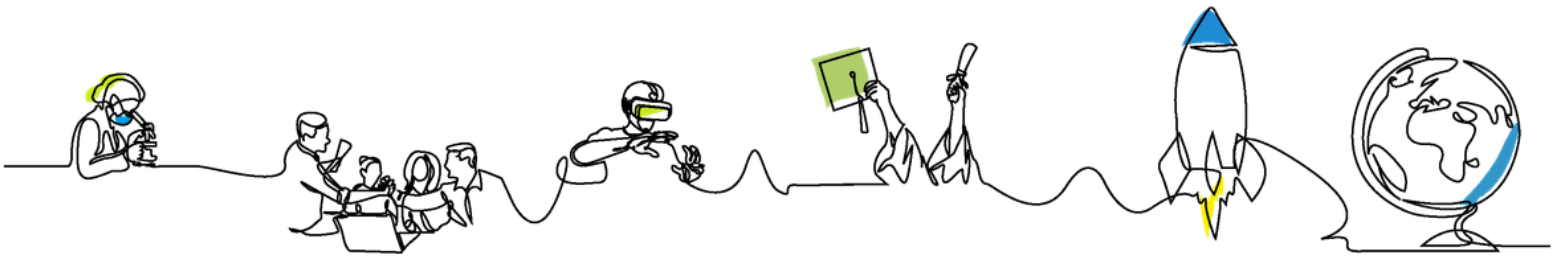
	Description
You will learn to	• Define interspecific interactions, parasitism, parasites, pathogens, adaptations, co-evolution, parasite ecology, epidemiology, pathogen evolution, and social pressure • Identify main pathogen groups and their specific amazing adaptations • Describe the parasite's role in living communities and ecosystem dynamics. • Identify the pathogens' constraints and pressure on populations during the human species evolution and history
How you learn it	• Thematic Sessions, video analysis, thematic discussions, and debates.
How you will be assessed	• Participation to the discussions • Final Role-play

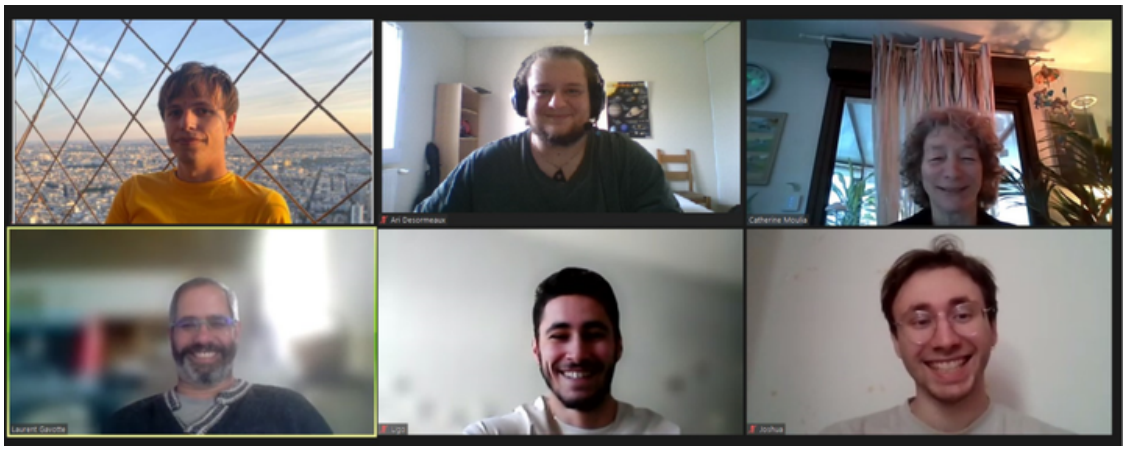
Teacher: Catherine Moulia
Laurent Gavotte

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UNIVERSITÉ DE MONTPELLIER

New version available from September 2026





Plastic, the invisible menace

Plastic pollution, particularly from micro- and nano-particles (MNPs), poses a growing threat to ecosystems and human health. These particles originate from everyday sources such as synthetic textiles and fragmented plastic waste, and their presence in the environment continues to increase over time, creating a "phantom threat." MNPs not only carry inherent toxicity but also absorb and transport environmental pollutants, compounding their harmful effects. Despite emerging research, the real-world impacts of MNPs remain poorly understood, and current environmental assessment tools like Life Cycle Analysis (LCA) and Safe and Sustainable by Design (SSbD) lack integration of MNP-related risks.
Given the absence of comprehensive methodologies, measuring the plastic footprint—based on the mass inventory of persistent plastics—is currently the most practical approach for informed decision-making.

Chapter 1: Generalities on plastic and key features
Chapter 2: Concept of "essential use": application to food packaging plastic
Chapter 3: Plastic footprint: calculation and application to case studies
Chapter 4: Risk assessment and management: approach and tools
Chapter 5: Extraction and characterization of microplastics using IR spectroscopy
Chapter 6: Regulatory framework: REACH

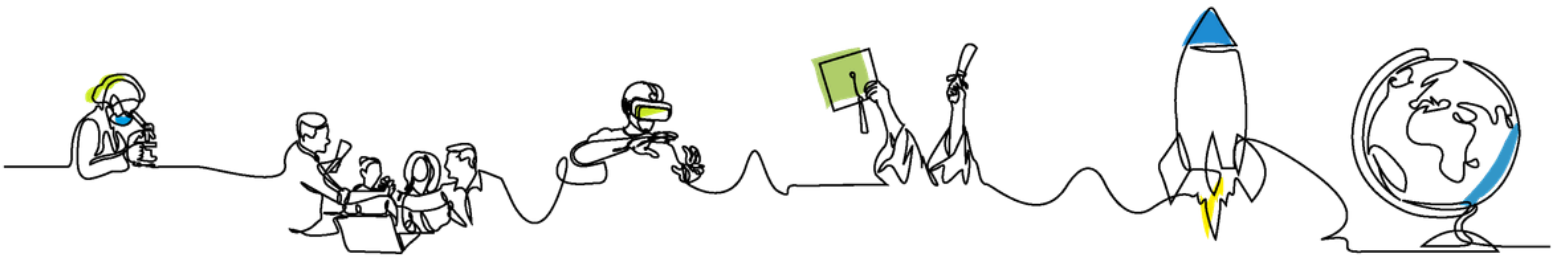
	Description
You will learn to	• Identify sources of plastic pollution and micro- and nano-plastics • Understand essential use and the environmental impacts of plastic use • Explain the basic principles of risk assessment in toxicology and ecotoxicology • Compare different indicators, such as plastic and carbon footprints, to inform decision-making • Analyse potential alternatives to plastic and discuss their trade-offs. • Present results, interpret findings, and draw conclusions.
How you learn it	• Thematic Sessions, video analysis, thematic discussions, and practical work
How you will be assessed	• Quizzes on Moodle • Final Debate

Teacher: Valérie Guillard
Stéphane Peyron
Nathalie Gontard

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INTER-DISCIPLINARY & IN-LAB GRADUATE PROGRAM
UNIVERSITÉ DE MONTPELLIER

Available from September 2026



Scientific Openness to Earth and Water Issues under Global Change

The objective of the course is, first, to learn more about earth sciences processes, climate changes and human activities consequences and, second, to learn how to sum up your knowledge in an original broadcast medium.

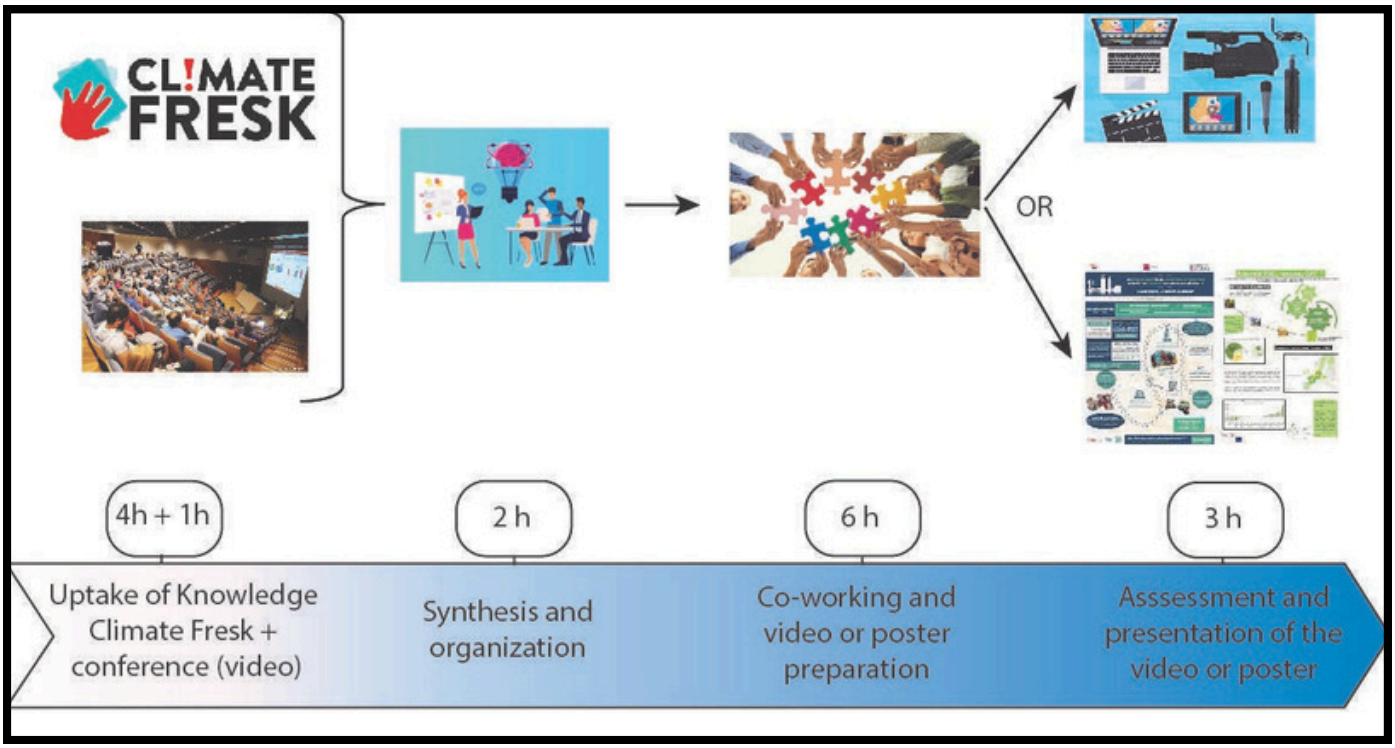
The aim of the Fresk workshop is to raise awareness and train participants to the environmental issues linked to climate changes, laying down the key solutions to reach more sustainable practices. It also encourages discussions between the participants on the topic. Therefore, by participating in this workshop you will be able to

	Description
You will learn to	• Summarize and classify the different human activity consequences • Propose documented solutions not only based on previous knowledge, but also on conferences • Evaluate the possible solutions based on the scientific legislation, considering the social and economic point of view • Compare to other problems and proposed and critical solutions (evaluate),
How you will learn it	• Climate Fresk, Videos, Discussions, group work
How you will be assessed	• Climate's Fresk participation • Poster's Creation and Presentation

Teacher: Linda Luquot

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Course Overview





Francia Andriatsiresy
Comparative Politics, M1 2025

"My three main insights from the course were that climate change affects our daily lives in ways we may not always realize, that its impacts vary significantly across regions and communities, and that we all share a responsibility for protecting our environment."



Shaping the Future of Agriculture

Climate change challenges agriculture to balance resilience, emissions reduction, and food security through an agroecological transition—integrating economic, environmental, and social performance. Agrobiodiversity is a key lever, studied across disciplines: in ecology, it enhances productivity and ecosystem stability; in evolutionary science, it provides genetic resources for plant adaptation; in social sciences, it embodies cultural, heritage, and relational values that shape farmers' choices—sometimes aligning with, and sometimes conflicting with, goals like yield or food security.

Chapter 1: History of Agriculture
Chapter 2: Diversity and Adaptation
Chapter 3: Climate and Agriculture
Chapter 4: Agroecology
Chapter 5: Sociology of Agrobiodiversity
Chapter 6: Simulation Game

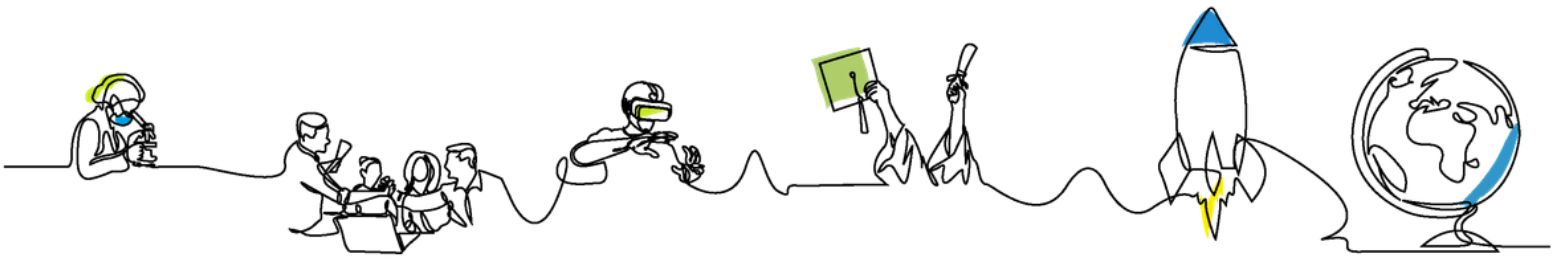
	Description
You will learn to	• Integrate interdisciplinary knowledge to address complex issues requiring diverse perspectives • Analyze interdisciplinary and transdisciplinary interactions • Develop critical thinking through the consideration of multiple perspectives on a given issue • Address current challenges, with a focus on the role of agrobiodiversity in the future of agriculture, within their broader social, environmental, and scientific contexts • Synthesize knowledge and understanding of the issues addressed
How you will learn it	• Lectures, Video, Debate, Meeting with the stakeholders, simulation game
How you will be assessed	• Participation in class • Participation in the simulation Game • Wide audience Animation

Teacher: Anne-Celine Thuillet
Jérôme Duminil
Adeline Barnaud
Cécile Berthouly-Salazar
Delphine Renard
Benjamin Sultan

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The Bionic Man

The bionic man is equipped with sensors of all kinds. These sensors can enhance our senses, increase physical capabilities, monitor health, and detect changes in the surrounding environment. But is this still science fiction, or is it already a reality? This course offers an introduction to electronic and photonic sensors applied to health and environmental monitoring, exploring the fundamental principles that are making the bionic man a reality. You will visit a laboratory to discover how next-generation electronic and photonic components are designed, fabricated, and applied. Through an individual project, you will then explore how these technologies can be connected to your own field of expertise, supported by simple hands-on experiments where relevant. The course will conclude with a poster session, providing an opportunity to share your work, exchange ideas with your peers, and receive feedback from a jury of professors and students.

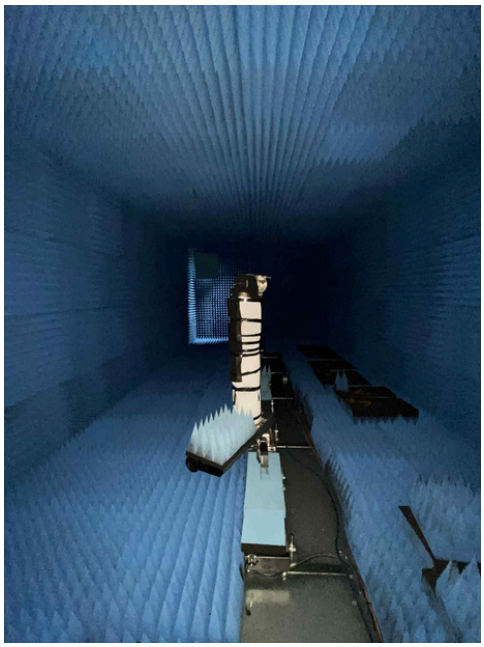
Chapter 1: Introduction on sensors & lab tours (from chip fabrication to applications)
Chapter 2: Photonic sensors: from basic theory to live demonstration
Chapter 3: Photonic & Electronic sensor project building
Chapter 4: Micro-conference for project presentation

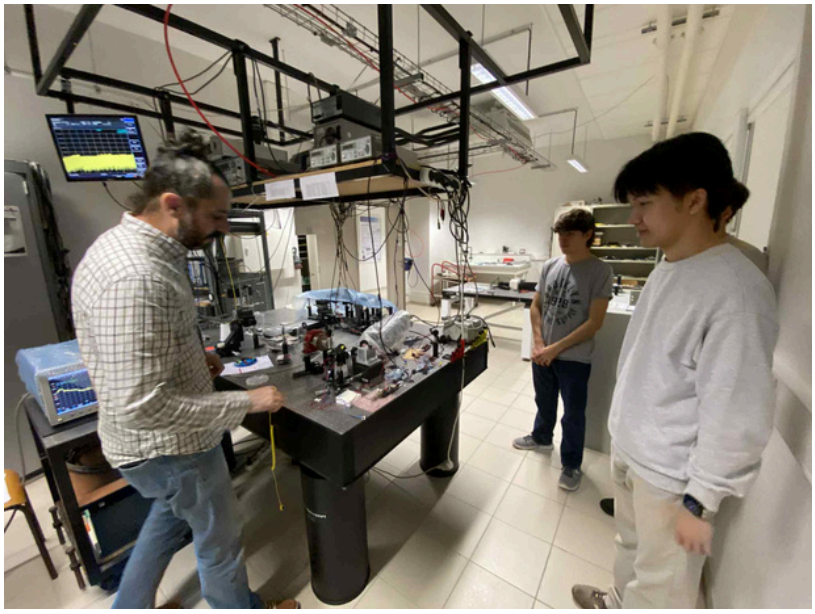
	Description
You will learn to	• Explain the basic principles and applications of electronic and photonic technologies. • Identify how these technologies can address challenges in their own field of expertise. • Design a research project integrating electronic or photonic technologies. • Communicate and discuss their ideas through a scientific poster.
How you will learn it	• Visit the IES laboratory (Institute of Electronic & Systems) & CTM (Technology facilities), short theoretical courses followed by live demonstrations, and weekly meeting for project building.
How you will be assessed	• Scientific Poster's Creation and Presentation

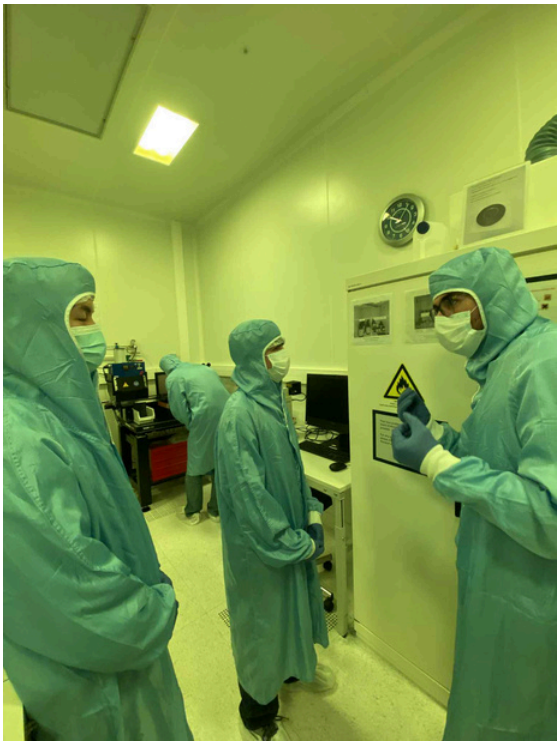
Teacher: Stéphane Blin
Brice Sorli

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Jinwei Zhang
Digimove, M1 2025

"The course showed me that photonics is a very promising field, particularly for applications in healthcare and assistive technologies that can enhance or restore human abilities. I also discovered how widely photonics is already integrated into our everyday lives and modern technologies, connecting different scientific disciplines. Finally, the course highlighted the importance of communicating scientific ideas clearly and visually, making even complex concepts accessible to a broader audience."



The Chemistry of Beer, Wine, and Culinary Arts

Ever wondered what makes a great wine or craft beer taste so distinctive, or why certain cooking techniques transform the flavor, texture, and aroma of food? In this course, you will explore the chemistry behind brewing, winemaking, fermentation, and cooking. Discover how chemical reactions and molecules shape the flavors, aromas, and textures we experience, and uncover the science behind everyday food and drink. Through an interdisciplinary approach, you will learn how molecular processes can transform simple ingredients into complex and memorable culinary experiences.

Chapter 1: Practice makes perfect: Chemical reactions/process involved in cooking
Chapter 2: How does a pro do it
Chapter 3: Beer: Brewing, keg transfer, and forced carbonation
Chapter 4: The Chemistry of Wine
Chapter 5: Comparative evolution of requirements for marketing a medical product worldwide

	Description
You will learn to	• Explain (in simple, relatable terms) how chemical processes (like fermentation or baking) create flavors in beer, wine, and food • Relate facts about how chemistry is used in everyday foods/drinks and explain some common kitchen mishaps (like flat beer or bland sauces) • Compare flavors and aromas through guided tastings to identify how the chemistry of ingredients can transform food. • Design your own small experiments (e.g., tweaking a recipe) based on your observations
How you will learn it	• Demonstration sessions and sensory experiments exploring the chemical phenomena involved in food transformation.
How you will be assessed	• Group Oral Presentation • Written Report Submission • Class attendance



Teacher: Tahmer Sharkawi
Charles Cuneault
Cédric Saucier

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Charbel Chedid
Sciences for Human Health, M1 2025

"My three main takeaways from the course were the important role of the Maillard reaction in shaping the color and flavor of food, the complexity of wine analysis and the wide range of aromas that experts can identify, and the fact that even relatively simple processes such as brewing beer require attention to detail. I also learned that small choices, such as avoiding pressing the grains during brewing to prevent excessive tannins, can significantly affect the final result. Most importantly, I realized that even when you know the ingredients and the process, the outcome can still be surprising."

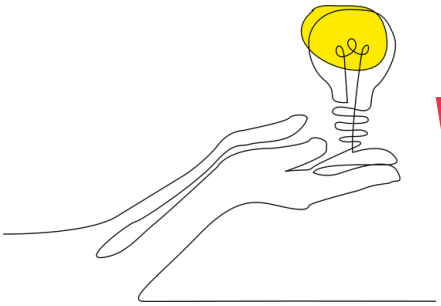




Katherine Tomaska
Earth and Water Under Global Change, M2 2025

"My three main takeaways from the course were: (1) chemistry is everywhere, especially in the culinary arts; (2) many flavors result from complex chemical reactions triggered by heat, and getting them right can be challenging; and (3) despite the diversity of cuisines around the world, they are connected by many of the same underlying chemical principles.





Who's Afraid of AI?

Artificial Intelligence (AI) is playing an increasingly important role in our lives. Are you equipped to understand it and make the most of it, or are you at risk of becoming dependent on the technology and those who control it? This course explores AI as a powerful tool for improving productivity when used thoughtfully and responsibly.

You will discover practical applications of existing AI tools while gaining an understanding of how they work, their capabilities, and their limitations. You will also explore the challenges associated with AI, including ethical concerns, risks, and potential misuse.

Designed as an interactive, project-based learning experience, the course combines lectures, flipped classroom activities, practical tutorials, and collaborative discussions. Throughout the course, you will progressively design and develop a project tailored to your field of study, with guidance and feedback from the instructors.

The course concludes with final project presentations, where you will showcase your work, communicate outcomes, and reflect on your learning experience.

	Description
You will learn to	• Develop an interdisciplinary understanding of LLMs' societal, scientific, and policy impacts. • Acquire technical and evaluative skills for using and testing AI tools. • Critically assess bias, accuracy, and ethical implications. • Strengthen teamwork and communication across disciplinary backgrounds. • Produce impact-oriented outputs relevant to research, innovation, or policy.
How you will learn it	• Interactive lectures and discussions, Flipped classroom activities, Hands-on practical tutorials, Project-based learning
How you will be assessed	• Project (Oral and Wirtten presentation)



Teacher: Ovidiu Radulescu
Gabriele Orlando

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Arpan Dey
Modeling Biological and environmental systems, M1 2025

"My three main takeaways from the course were: (1) understanding how LLMs use statistical patterns to generate sequences of meaningful words; (2) learning how and why LLMs can hallucinate, particularly when solving mathematical problems and when comparing text-based prompts with visual reasoning; and (3) realizing that LLMs should not be trusted blindly and that clear, well-structured prompts can help improve the quality of their responses."

Mathilde Fonseca
Earth and Water Under Global Change, M1 2025



"My three main insights from the course were: that defining clear laws and rules for AI ethics is a complex challenge; that AI hallucinations are an important and fascinating topic; and that AI can be a powerful tool when used thoughtfully, responsibly, and with caution."



Constanza Paredes
Comparative Politics, M1 2025

"My three main insights from the course were gaining a better understanding of what "intelligence" means in the context of AI, developing a clearer awareness of the limitations and risks of using AI, and learning to recognize when AI can be useful and when it should not be relied upon. I would like to explore further how prompting techniques can be used to support systematic analysis and improve AI-assisted predictions."



Why Democracy is Hard

We talk about democracy all the time, usually in the negative by criticizing and idea, a regime or an action of our own government as “undemocratic” or even “anti-democratic.” But what do we really mean by this? In this class, we will look more closely at the core elements that we commonly attribute to the ideal of democracy: Sovereignty, liberty, equality, and participation. We will trace the origins of these concepts in the Western political tradition, and consider the extent to which they are complementary or in some cases contradictory. We will think about how these principles can be translated into practice. Finally, we will also consider alternative ideals and regimes, and seek to understand the fundamental grounds on which they differ from democratic ones.

Chapter 1: Politics, Utopias and Democracy
Chapter 2: Sovereignty and Liberty
Chapter 3: Equality and Participation
Chapter 4: Contradictions and Alternatives
Chapter 5: From Ideas to Institutions

TASK	Dependencies/Challenges
You will learn to	• Compare and contrast different definitions of Democracy and better understand why these differences persist. • Better understand the theoretical and philosophical underpinnings of different forms of government, including undemocratic ones. • Develop a critical and thoughtful opinion about individual and common good. • Appreciate the use and importance of thinking about politics and political regimes in terms of competing utopia • Most generally and importantly, participation in this course will help you to better define and defend your own political views, whatever these may be, as well as to better understand and appreciate the views and arguments of others.
How you will learn it	• Lectures, Workshops of discussion.
How you will be assessed	• Participation to both workshops and Written report

Teacher: Christophe Roux
Marc Smyrl

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Arditë Bujupaj
Qbio, M1 2025

"I learned that rules are shaped by the systems in which they operate, and that different systems can be built around different visions of an ideal society. Each system has its own goals and priorities, and it is up to us to reflect on what we value and what kind of system we want to support. Creating rules for entire communities requires balancing many criteria, such as inclusion, equality, and freedom. While systems are often designed to uphold these values, they may struggle to respect all of them equally."



Transversal Training Units

These teaching units are designed to develop transferable competencies that complement your disciplinary training and support your academic and professional development. They cover six main competency areas:

- Team Management
- Scientific Dissemination and Popularization
- Effective Communication
- Information and Data Management
- Innovation and Project Valorisation
- Science and Society

Some TTUs are shared with the Doctoral College (CDUM), others with the Engineering Program, and the rest with specialized Instructors.

This mutualisation gives you access to a broader range of training opportunities and allows you to learn alongside students and researchers from different academic backgrounds, while progressively developing competencies relevant to both academic and professional contexts.

How do TTUs work?

Each Master's track has defined requirements for the number of TTU hours you must complete (check your requirements here). To fulfil your requirement, you can select different TTUs and combine them until you reach the required number of hours. You are welcome to complete more than the minimum required.

TTUs are short training sessions, ranging from 2 to 15 hours. Some trainings are spread over two or three dates, with all sessions forming part of the same training. Make sure to check the full schedule before registering. Some TTUs are offered in Group A, Group B, or even Group C. These groups correspond to the same training offered on different dates.
Registering for Group A does not allow you to attend Group B or C as a replacement if you are unable to attend your registered session.

Levels 1 and 2

Some TTUs are offered at Level 1 and Level 2. Level 2 builds on the knowledge and competencies introduced at Level 1, which is therefore normally a prerequisite.
If you have already acquired the relevant knowledge or competencies through previous experience or training, you may register directly for Level 2.

How will you be assessed?

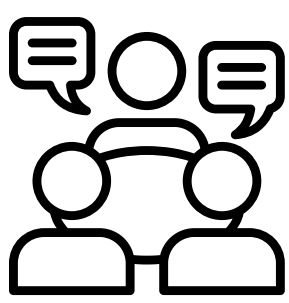
TTUs focus on the development and application of transversal competencies. Assessment will therefore not only consider what you have learned, but also your ability to apply these competencies to your own discipline and professional project.

The contribution of your TTUs will be assessed by the academic team of your Master's track, generally through an oral presentation, sometimes as part of your personal project presentation. You may be asked to discuss which TTUs you chose and why, what competencies you developed, how you can apply them to your discipline and professional project, and how the TTUs contributed to your approach to your project. Other questions relevant to your Master's track may also be discussed.

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IDIL TRANSVERSAL Training Units 26-27

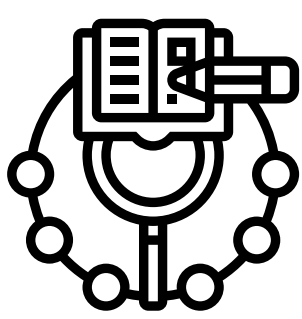


Block 1 – Team Management

Level 1
- Becoming a manager: the fundamentals (8h)

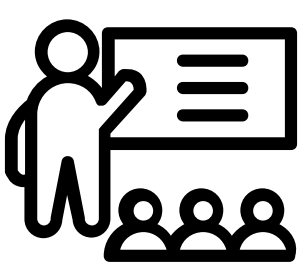
Level 2
- Preventing and managing conflicts (7h)

Block 2 – Scientific dissemination and popularization



Level 1
- Talking about science- The basics of scientific mediation (8h)
- Convincing and debating (8h)
- Publishing as academics (3h)
- Building your Identity as a Researcher (2h) **NEW**
- Peer review process (3h)
- Preparing, conducting, and responding to interviews (7h)

Block 4 – Effective communication

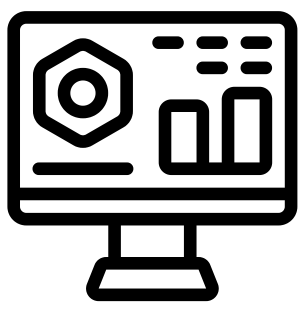


Level 1
- Body language proficiency (8h)
- Public speaking - Oral communication (8h)
- Scientific Writing: How to Communicate Effectively and Avoid Plagiarism (12h)

Level 2
- Developing effective reading strategies and tactics (7h)
- Preparing to attend a conference (Poster and Oral Presentation) (14h)

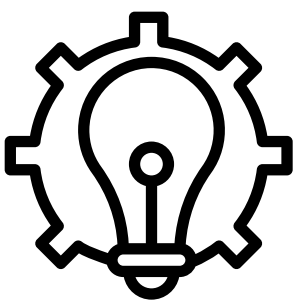
Block 5 –Information and data management

Level 1
- Descriptive Statistics (4h)
- Practical introduction to versioning and sharing your work with Git/GitHub (3h)
- System R - level 1 - Tidyverse and Rmarkdown to wrangle data and produce plots (14h)
- Unix - learning by doing (6h)
- Literature discovery and management (3h)
- Research data management (3h)
- AI for Data Work: Where it works, where it doesn't, and how to use it (6h) **NEW**
- Intro to Python : Understanding the language **NEW**



Level 2
- Introduction to Statistical Analysis (7h)°
- Systeme R-level 2- Rstudio, Tidyverse, and Rmarkdown (7h)*
- Data Visualisation (3h)* **NEW**
- Data Wrangling (3h)* **NEW**

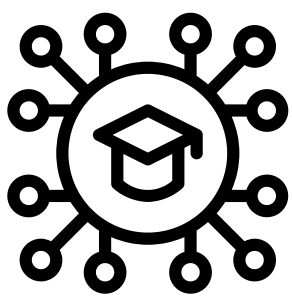
(*) Prerequisites: Getting started with Rstudio.
(°) Prerequisites: Descriptive Statistics



Block 7 – Innovation and Project Valorisation

Level 1
- Welcome to the Innovation Jungle (4h)

Block 8 – Sciences and Society



Level 1
- Research integrity in everyday practice (3h)
- Inclu Lab: Promoting inclusion in the lab (6h)

Level 2
- MOOC Scientific integrity (15h)

Level 1 courses available to M1 and M2 students who did not study them in M1.
Level 2 reserved to students who completed prerequisited Level 1 course on the same topic.

IDIL Transversal Training Units Description

Block 1 – Team Management

Level 1

- **Introduction to Management (7h) CDUM**

This course provides an understandable and up-to-date perspective on management and the manager's role within companies. This course teaches the foundations, identifies spontaneous management methods, and develops your ability to adapt to different types of situations people.

Level 2

- **Preparing and leading a work meeting (6h) CDUM**

Work meetings guide all projects. Knowing how to organize and run meetings is one of the key success factors of any project. Meetings are crucial for interdisciplinary projects involving colleagues from different backgrounds.

- **Preventing and managing conflicts (7h) CDUM**

This course helps you understand how conflicts unfold, acquire the necessary methods to prevent them, manage them, and, above all, avoid making them worse. The differences between the way conflicts are handled in a business environment and in a research team are discussed at the end of the day.

Block 2 – Scientific dissemination and popularization

Level 1

- **Talking about science- The basics of scientific mediation (8h) CDUM**

As young players in the scientific community, you can learn how to present a scientific topic engagingly and interactively to share and disseminate your knowledge to a diverse audience (including primary school students, high school students, and the general public).

- **Convincing and debating (8h) CDUM**

This course and its rhetorical elements will give you the skills to defend your points of view and assert yourself through a variety of role-playing situations. In other words, you will improve your leadership skills!

- **Publishing as academics (3h) PRI**

This course will be focused on the evolution of the scientific publishing world, and how to best publish your future scientific articles in open access and at a lower cost.

- **Building your Identity as a Researcher (2h)**

Cultivating your researcher identity online is an essential component of communicating your research and presenting yourself as a scholar. If you are a junior researcher, being present online contributes to your impact within and beyond academia.

- **Peer review process (3h) PRI**

By the end of this training, you be able to critically evaluate research articles and understand the peer review process. You willl identify strengths and weaknesses in research methods, data analysis, and arguments. You will also provide constructive feedback to improve the research's clarity, validity, and impact. Additionally, you will assess ethical considerations and the research's relevance within its field. Ultimately, you will gain confidence in contributing to the academic community through thoughtful and thorough peer reviews.

- **Preparing, conducting, and responding to interviews (7h) CDUM**

At some point in your work, you will need to be able to respond to requests from journalists and the media. This course helps you prepare scientific communication for an interview. Come test yourself. No doubt you will enjoy this kind of exercise!

Block 4 – Effective communication

Level 1

- **Body language proficiency (8h) CDUM**

Body language conveys meaning just as effectively as words. People react subconsciously to non-verbal messages. This course is based on testimonials from speakers and on scientific research. Learn how to turn your stage fright into an asset through concrete examples and practical exercises.

- **Public speaking - Oral communication (7h) CDUM**

Would you like to speak in public with ease and confidence? This course will help you develop your enthusiasm and interaction with your audience. It offers a simple and effective method enabling you to make progress quickly.

- **Scientific Writing: How to Communicate Effectively and Avoid Plagiarism (12h)**

This course trains students in scientific writing, focusing on structuring key texts like abstracts, literature reviews, presentations, research proposals, reports, and their MSc thesis. It covers literature management, proper citation, plagiarism prevention, and the responsible use of AI in writing. By the end, students will be able to produce clear, well-structured texts for scientific audiences, benefiting their research projects and internships throughout the IDIL Master program.

Level 2

- **Developing effective reading strategies and tactics (7h) CDUM**

This speed-reading course implements a global and controlled method for making progress. The objective is to increase your reading speed by about 80% and implement operational strategies (prioritization, location, selection) for information management (summarizing, memorizing, etc.).

- **Preparing to attend a conference (Poster and Oral Presentation) (10h) CDUM**

The purpose of this course is to give you the keys to help you choose and benefit from scientific conferences, and provide you with the methodology and tools to prepare your communication effectively. Training includes an exercise creating an oral presentation or poster (according to participants' needs).

Level 1 courses available to M1 and M2 students who did not study them in M1.
Level 2 reserved to students who completed prerequisited Level 1 course on the same topic.

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IDIL Transversal Training Units Description

Block 5 –Information and data management

Level 1

- **Descriptive Statistics (4h)**

This short module aims to review the presentation of data by means of numerical figures. The main descriptive statistics to measure the central tendency, the dispersion, and the form of the distribution of a variable are presented before considering some measures of the relation between variables. Examples are given using the usual software or statistical software. This module is useful in many domains because it helps to summarize data, and it should be an introduction to statistical analysis where the estimation and test of hypotheses are developed.

- **Practical introduction to versioning and sharing your work with Git/GitHub (3h)**

After briefly highlighting the advantages of versioning your work, this course will cover the fundamentals of file versioning with Git (local) and GitHub (online) for individual and group projects. Although commonly associated with coding tasks, Git can be used with any type of file (reports, dissertations, spreadsheets, etc.). Knowing GitHub is highly valuable for most tech roles and serves as a distinctive addition to a CV. The students will have the opportunity to practice individually and in groups.

- **Getting started with RStudio, Tidyverse, and Rmarkdown to wrangle data and produce plots (14h)**

The purpose of this course is to teach you the basics of Rstudio, Tidyverse, and Rmarkdown, for manipulating tables, producing graphs, and generating reports. The course focuses on the data analysis steps before statistical analysis, leveraging the Tidyverse software package and language designed specifically for data manipulation and producing graphics.

- **Unix - learning by doing (6h)**

Unix is not in single-click territory! No need to panic, this course is designed for beginners and users with little experience. Learn how to survive on a Unix system, find your way through the jungle of commands, plant environment variables, bounce from one machine to another, and defeat hackers by protecting your data! A great way to impress your friends and family… and above all, to prevent computers from holding you back in your doctoral work!

- **Literature discovery and management (3h)**

By the end of this module, you will be adept at discovering, evaluating, and managing scholarly literature for your research projects. You will acquire skills in using advanced search techniques and databases to efficiently find relevant literature. You will learn to critically assess the quality and relevance of sources, ensuring a strong foundation for your research. Additionally, you will become proficient in using reference management tools to organize and cite literature systematically. This module will also enhance your ability to stay updated with the latest developments in your field, fostering a proactive and informed approach to academic research.

- **Research data management (3h)**

By the end of this module, you will understand the principles and practices of effective research data management. You will know how to organize, store, and preserve data to ensure its integrity and accessibility throughout the research lifecycle following the FAIR principles. You will learn best practices for data documentation, including metadata creation, to facilitate data sharing and reproducibility. You will become proficient in using tools and software for data management and will be knowledgeable about ethical considerations and legal requirements related to data privacy and security. This module will equip you with the skills needed to manage research data efficiently, promoting high standards of data stewardship in your academic and professional career.

- **AI for Data Work: Where it works, where it doesn't, and how to use it (6h)**

This training provides a practical introduction to using artificial intelligence for data analysis and visualization. Participants will explore how AI works, including its strengths, limitations, and how to validate its outputs. The course focuses on understanding how to write effective prompts by clearly defining intent, data structure, constraints, and verification steps. Applications will focus on data visualization, helping participants understand how AI generates graphs in order to guide and refine results. The session shows how to adapt existing plotting templates and efficiently debug common issues. A hands-on mini-project will allow participants to reproduce a complex, publication-style graph using AI and provided data.

- **Introduction to Python : understanding the language and how to use it (6h)**

Python is one of the most widely used programming languages for data analysis, automation, and scientific research. This workshop introduces the foundations of Python through a practical, data-focused approach. Participants will learn how to read and understand basic Python syntax, execute scripts/tools from the terminal, recognise common data structures, and manipulate tabular data using the pandas package. Around 90 minutes will be dedicated to hands-on exercises and short quizzes to reinforce the concepts.

Level 2

- **Introduction to Statistical Analysis 2 (7h)**

This course provides the basics of classical statistical analysis through examples without going deeply into theoretical concepts. Starting with descriptive statistics, the course focuses on hypothesis testing on those statistics and their comparison between different samples. The course also covers the analysis of variance and regression methods on quantitative and qualitative variables. The goal is to learn how to perform a preliminary statistical analysis on data sets.

Prerequisites: Intro to Statistical Analysis 1

- **Systeme R-level 2- RStudio, Tidyverse, and Rmarkdown (7h)**

If you took the two-day course on the basics of Tidyverse and want to go further into using Tidyverse to handle your tables, produce your graphs, and generate R Markdown reports, then this course is for you!

Prerequisites: Getting started with RStudio.

- **Data Wrangling in R (3h)***

No dataset is ever born "ready" to be analysed or plotted. Many steps are usually necessary. This course covers the basics of data transformation in R to make data preparation reproducible (column addition/deletion, adding new attributes, aggregating data, selecting, filtering, …). A particular focus will be on character data, which requires the most intensive curation before it becomes usable in analysis. 60 to 90 minutes will be dedicated to the direct application of the concepts.

Prerequisites: Getting started with RStudio.

Level 1 courses available to M1 and M2 students who did not study them in M1.
Level 2 reserved to students who completed prerequisited Level 1 course on the same topic.

IDIL Transversal Training Units Description

- **Data Wrangling in R (3h)***

No dataset is ever born "ready" to be analysed or plotted. Many steps are usually necessary. This course covers the basics of data transformation in R to make data preparation reproducible (column addition/deletion, adding new attributes, aggregating data, selecting, filtering, …). A particular focus will be on character data, which requires the most intensive curation before it becomes usable in analysis. 60 to 90 minutes will be dedicated to the direct application of the concepts.
Prerequisites: Getting started with RStudio.

- **Data Visualisation in R (3h)***

This course covers the fundamentals of data visualisation, including: selecting the appropriate visualisation for your data; a conceptual overview of ggplot2 functions; creating simple figures with it; and finding reusable templates for more complex visualisations. 60 to 90 minutes will be allocated to the practical application of these concepts.
Prerequisites: Getting started with RStudio.
Recommended: Data Wrangling

Block 7 – Innovation and Project Valorisation

Level 1

- **Welcome to the Innovation Jungle (4h) INITIUM**

Are you keen to discover the innovation process? Would you like to demystify all the mechanisms for valorizing your future scientific research? Do you want to enrich your scientific vision with tools that allow you to approach your projects so that they meet societal challenges?
The aim of this module is to introduce you to innovation tools illustrated by practical cases for integration into your scientific reflections, thus providing a perspective on the valorization of the projects to which you contribute**.**

Block 8 – Sciences and Society

Level 1

- **Research integrity in everyday practice (3h) PRI**

By the end of this module, you will have a thorough understanding of research integrity and its application in everyday practice. You will learn about the core principles of ethical research conduct, including honesty, transparency, and accountability. You will be able to identify and address common ethical issues and dilemmas that arise during the research process. You will gain knowledge on how to avoid research misconduct, such as plagiarism, data fabrication, and falsification. Additionally, you will understand the importance of responsible authorship, peer review, and collaborative research practices. This module will prepare you to uphold the highest standards of integrity in your research endeavors, fostering a culture of ethical and responsible research within your academic and professional communities.

- **INCLU LAB': Promoting Inclusion in the Lab (6h)**

Diversity, Equity & Inclusion (DEI) is crucial in science, enhancing productivity and innovation. Society as a large, and in particular, research teams are becoming increasingly diverse in terms of social identities, stretching from sex and gender over ethnicities and nationalities to appearances, languages, age, and socio-economic status, to name but a few, DEI education remains lacking.
This workshop, designed for master's and doctoral students in multidisciplinary research, explores DEI from various perspectives. It equips participants with essential soft skills to navigate diverse work environments, fostering belonging and improving team performance and innovation.

- **CULTURES IN'LAB: Promoting Cultural Inclusion (6h)**

This training explores intercultural skills in laboratory and research environments. It begins with an interactive cultural simulation activity, followed by key sessions on cultural self-reflexivity, inclusive intercultural communication, and collaborative project planning in multicultural teams. Participants will also develop competencies in culturally inclusive evaluation and decision-making, supported by theoretical inputs on intercultural communication concepts. The training emphasizes inclusion in laboratory contexts and concludes with a synthesis of key learnings and a personal commitment exercise to support the application of these skills in professional practice.

Level 2

- **MOOC Scientific integrity (15h) CDUM**

Science constitutes a fundamental value in our democratic societies, which promote the desire for knowledge about the world and mankind. Nevertheless, today's techno-scientific performance and the acceleration of innovations can sometimes be intimidating. Furthermore, the magnitude of the resources involved, a competitive international environment, and conflicts of interest between private and common good also create a climate of mistrust.
For more information:
https://lms.fun-mooc.fr/courses/course-v1:ubordeaux+28007EN+session06/info

Level 1 courses available to M1 and M2 students who did not study them in M1.
Level 2 reserved to students who completed prerequisited Level 1 course on the same topic.

How many Non-core and Transversal Training Units should you take?



Depending on your Master's track, you will be required to complete either one or two Non-Core Teaching Units each year, as well as a defined number of hours of TTUs. The exact requirements vary by track, so the first step is to identify which pathway applies to you.

Check the table on the following page to find out how many Non-Core Teaching Units and TTU hours you are required to complete.



M1 and M2 may have different volumes of requirements. Please check before registering.

Students of	Mention	Academic year	# of Non-Core Units that SHOULD be taken	Number of TTU hours
Modeling	MEC	M1	2 (4 ECTS)	16h (2 ECTS)
	MEC	M2	2 (4 ECTS)	32h (4 ECTS)
	PHY	M1	2 (4 ECTS)	16h (2 ECTS)
	PHY	M2	2 (4 ECTS)	32h (4 ECTS)
Chemistry		M1	2 (4 ECTS)	32h (4 ECTS)
		M2	2 (4 ECTS)	32h (4 ECTS)
Health		M1	1 (2 ECTS)	16h (2 ECTS)
		M2	1 (2 ECTS)	24h (3 ECTS)
Aware	Water	M1	1 (2 ECTS)	32h (4 ECTS)
	Water	M2	1 (2 ECTS)	32h (4 ECTS)
	Earth	M1	1 (2 ECTS)	32h (4 ECTS)
	Earth	M2	1 (2 ECTS)	32h (4 ECTS)
Politics		M1	1 (2 ECTS)	8h (1 ECTS)
		M2	1 (2 ECTS)	32h (4 ECTS)
Plants		M1	1 (2 ECTS)	32h (4 ECTS)
		M2	1 (2 ECTS)	32h (4 ECTS)
Management		M1	1 (2 ECTS)	32h (4 ECTS)
		M2	2 (4 ECTS)	32h (4 ECTS)
QEE		M1	1 (2 ECTS)	16h (2 ECTS)
		M2	2 (4 ECTS)	16h (2 ECTS)
Eco-Epi		M1	1 (2 ECTS)	32h (4 ECTS)
		M2	2 (4 ECTS)	32h (4 ECTS)
Sensors		M1	1 (2 ECTS)	32h (4 ECTS)
		M2	2 (4 ECTS)	32h (4 ECTS)
Digimove		M1	2 (4 ECTS)	16h (2 ECTS)
		M2	1 (2 ECTS)	32h (4 ECTS)
Qbio		M1	1 (2 ECTS)	16h (2 ECTS)
		M2	1 (2 ECTS)	16h (2 ECTS)
Economy		M1	1 (2 ECTS)	32h (4 ECTS)
		M2	2 (4 ECTS)	32h (4 ECTS)



Enrollment Process

Step 1- Check your requirements

Before choosing your teaching units, check the requirements for your Master's track and year of study. Make sure you know how many Non-Core Training Units and how many Transversal Training Unit hours you are required to complete (here)

Step 2- Explore your options

Browse the Non-core Training Units (here) and the Transversal Training Units (here) presented in this handbook, and choose those that best match your interests, learning goals, and academic background

Step 3- Check the Schedule

Before registering for the **Non-core units**, check the IDIL website and make sure that the dates of the unit are compatible with your schedule. Please pay particular attention to the first session and the assessed sessions. For the **Transversal units (TTUs)**, please refer to this chart (here) to check the specific dates and locations.

We strongly recommend checking these dates before registering to avoid any scheduling conflicts.

Step 4 — Register

After the Summer School week, you will receive an email with the registration links for each type of Teaching Unit. Follow the instructions provided and register **before the deadline.**

Please note that all Teaching Units have a maximum capacity, which may vary depending on the nature of the course and its activities. For example, most Non-Core Teaching Units have a maximum capacity of 20 students, while some have fewer places. TTU capacities may also vary, with some sessions accommodating 15 students and others up to 25.

Places are allocated on a first-come, first-served basis, so we recommend registering as early as possible to secure your place.

Once a course has reached its maximum capacity, no additional registrations can be accepted.

Step 5- Check your final registration

Once registration closes, the registration links will display the final lists of participants for each teaching unit.

You will then be enrolled in the Moodle page of your registered courses. Please allow a few days for this process to be completed.

Then, check the IDIL AGENDA for the locations of your Non-Core Teaching Units, and add your TTU sessions to your personal calendar so that you receive reminders (Here to know how)

Step 6- Prepare your course

Check your course's Moodle page for the detailed schedule, activities, and assessment requirements. Most Non-Core Teaching Units include a preparatory activity to be completed before the first session, which may contribute to your assessment. Make sure to complete any required preparation in advance.



Congratulations on completing your Master's degree!

After two years of hard work and learning, you have reached this important milestone.

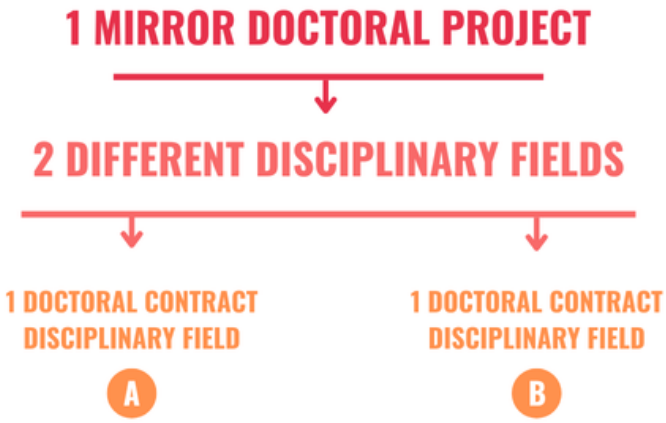
We are so proud of what you have accomplished and excited to see what the future holds for you.

Best of luck in your next professional adventures!

IDIL MIRROR THESES



A mirror doctoral project combines two distinct disciplinary PhDs into a unified multidisciplinary effort.
The goal is to explore a research project not only through the lenses of two different disciplines by employing each discipline's unique methods and references but also by enhancing multidisciplinary collaboration



If you want to continue the IDIL adventure, we encourage you to apply. For more information, please check our website.
For further questions, email
idil-team@umontpellier.fr



Pc: Marine Jannin

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