



### **WELCOME DAY**

Università degli Studi di Milano-Bicocca

Piazza dell'Ateneo Nuovo 1, 20126 Milano www.unimib.it

11 November 2025 10:00 Aula Martini







**11 novembre 2025** ore **10:00** Aula Martini U6-04

**Prof. Paola Branduardi**President of PhD School







**11 novembre 2025 ore 10:00** Aula Martini U6-04

**Dr. Raffaella Citriniti** – Head of PhD School office **Dr. Sofia Giorgini, Dr. Cristina Fassina** – PhD School office



### Where do I find the information I need for my Phd life?



1. Tutor and the Coordinator

2. The school Website

3. The office: <a href="mailto:dottorati@unimib.it">dottorati@unimib.it</a>

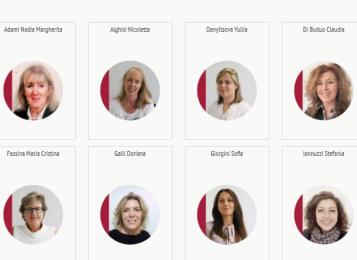


### THE PHD OFFICE: get in touch



Lombardi Angelo

Raffaella Citriniti Capo settore





### dottorati@unimib.it

The PhD School office will reply by e-mail within 24 hours,



026448 6237



### THE PHD WEBSITE

The Doctoral School



PhD Programmes



Applying for a Doctorate



During your PhD



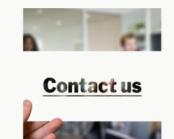
PhD and Enterprise



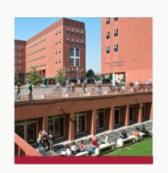
Internationalization



Contacts

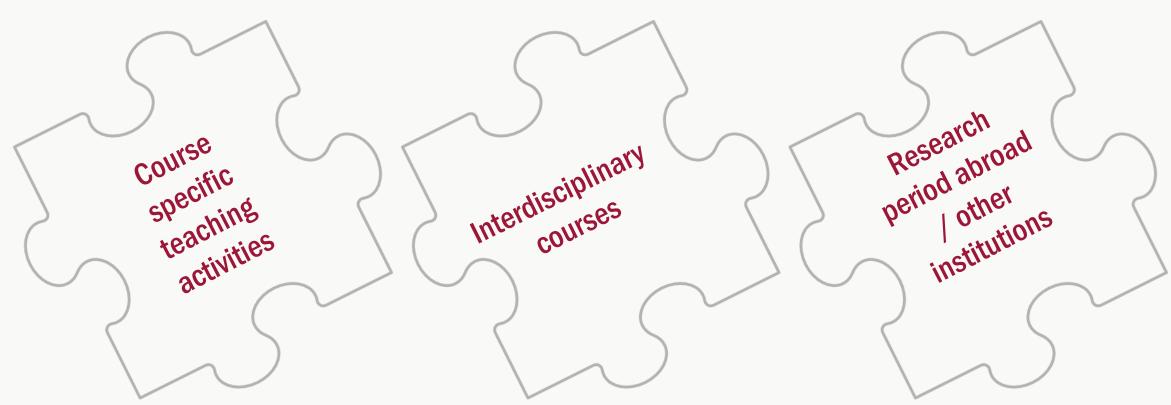


AVA3 in PhD



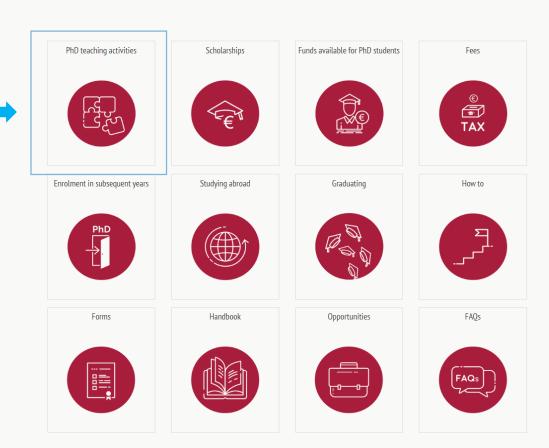


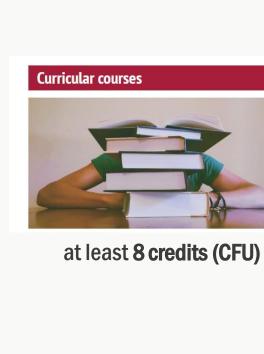
### **YOUR PHD PATH**





### **TEACHING ACTIVITIES**







at least 3 credits (CFU)

#### **TEACHING ACTIVITIES**



#### Filling in the study plan

Registration for examination sessions

#### **Curricular courses**



According to the own PhD programme, you will first have to fill in the study plan by selecting the courses to be attended for the three-year period.

You can find enclosed the guide for filling in the study plan.

 Study plan with mandatory teaching activities (PhDs in ASEP-40<sup>th</sup>cycle, Anthropology, Education in Contemporary Society, Intangible Heritage, Legal Sciences, URBEUR)

IT IS NOT REQUIRED TO FILL IN THE STUDY PLAN ( NOR TO REGISTER FOR THE EXAMINATION SESSIONS). Courses are uploaded directly into the booklet once they have been attended.

2. Study plan with optional teaching activities (PhDs in Physics and Astronomy, Computer Science, DIMET, Mathematics, Neuroscience, Materials Science and Nanotechnology, Marine Sciences, Chemical, Geological and Environmental Sciences, TECSBI).

You will be required to:

- complete the study plan by selecting the teaching activities to be attended for the three-year period
- sign up for the examination session according to the published schedule. It is possible to sign up even if you have not attended the course yet
- 3. Study plan with both mandatory and optional teaching activities ( PhDs in ASEP-41<sup>st</sup>cycle, Business for society, ECOSTAT, Nursing and midwifery, Psychology, Public health, Resources for the new PA, Strategic innovation for sustainable and smart ecosystems)

#### Interdisciplinary courses



The PhD School offers several interdisciplinary courses to enable PhD students to develop both basic linguistic-communication and technological competences as well as interdisciplinary and soft skills, also offering the opportunity for PhD students students from different areas to discuss interdisciplinary topics.

Interdisciplinary courses do not have to be chosen in the study plan, but will be added to the booklet after the teacher's final evaluation.

#### ATTENDANCE

Attendance is mandatory for 70% of the scheduled class hours for each course.

The attendance mode (online, in-person etc.) is decided by the teacher and is specified in the syllabus of each course.

#### **COURSE REGISTRATION**

You can enrol in a course by entering the **Segreterie On-line** and choosing "Elective courses", only during the registration periods specified for each course.

The registration will be closed on the achivement of the maximum number of partecipants specified in syllabus.

#### No additional registration on the e-learning platform is required

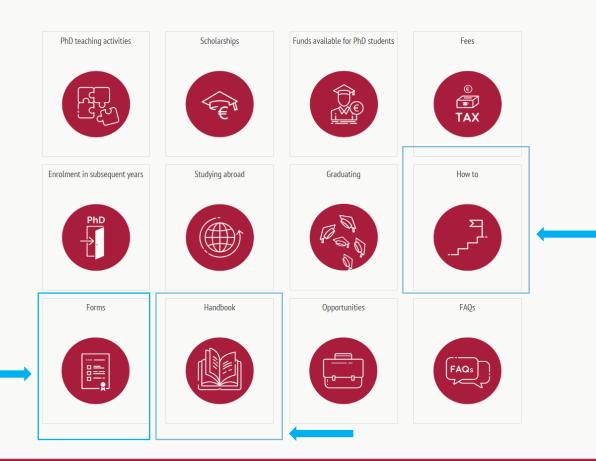
Syllabus and teaching material will be available by accessing the **e- learning platform** with university credentials.

INTERDISCIPLINARY COURSES - SCHEDULES



# **During your PhD: How** to







### How to...

#### < Doctoral research (PhD) programmes

#### > During your PhD

Scholarship

Funds available for PhD students

Fees

Enrolment in subsequent years

Studying abroad

Graduating

#### How to...

Interdisciplinary courses

Opportunities for PhD students/graduates

FAQs

Suspension of research activity	>
Withdrawal	>
Work/educational activities	>
Certification requests	~

By law, the University can only issue certificates with a revenue stamp. These can only be used in private contexts and must, by law, bear the following wording: "This certificate may not be presented to public administration bodies or private managers of public services."

It is possible to request certificates of attendance, registration with or without the amount of the grant, and graduation, in both Italian and English, by sending the "Request certificates" form, available in the **Forms** section to **dottorati@unimib.it** 

Following the request, a MAV pay slip will be generated and you will be able to view it on your personal page of the Online Student Registry.

- €16.00 for the certificate request form;
- €16.00 for the issue of each certificate

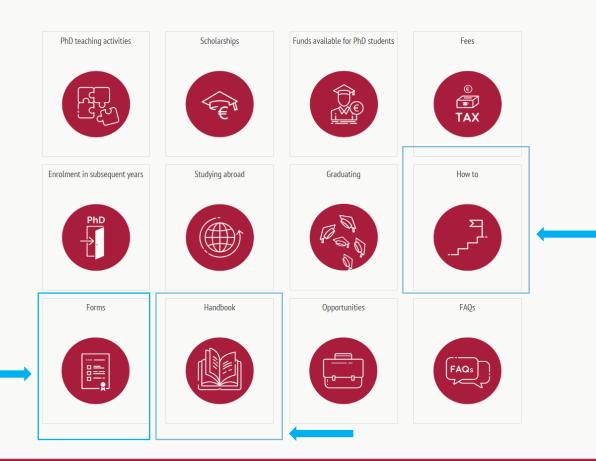
After a few days, the certificate can be picked up at the office by appointment or sent to your home address (cost of shipping: €10 in Italy, €15 abroad). By law, public authorities cannot request certificates but only self-certifications, which can be printed from your personal page of the Online Student Registry.

Duplicate badge	>
Insurance	>
University residence	>
Catering service	>
Missions	>



# **During your PhD: How** to







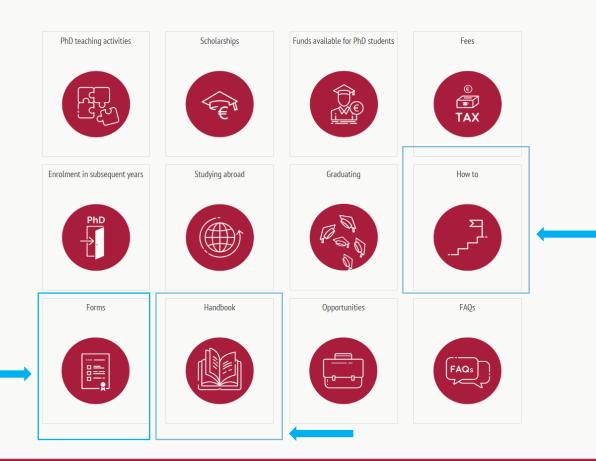
### **Modulistica / Forms and certificates**

#### **Immatricolazione / Enrolment** < Dottorato di ricerca **Dottorandi / PhD students** > La Carriera Borsa di studio Richiesta certificati / Request for certificates Fondi a disposizione dei dottorandi Richiesta di frequenza all'estero / Request for training abroad Accesso agli anni successivi Attestazione di frequenza per periodi all'estero / Attendance certificate for periods abroad Studiare all'estero Conseguimento del titolo Sospensione frequenza / Suspension of attendance Come fare per.... Richiesta duplicato badge / Badge duplicate request Modulistica per dottorandi Corsi interdisciplinari Comunicazione gravidanza / Notification of pregnancy status FAOs Modulo RCT dottorandi area medica / Subscription form third part liability insurance coverage - PhD students Medical Area Opportunità per dottorandi/dottori di Ripresa attività didattica / Resumption of activities Rinuncia agli studi / Withdrawal from Ph.D Rinuncia alla borsa di dottorato / Withdrawal scholarship Richiesta autorizzazione incarichi / Request of working activity Richiesta cotutela di tesi / Application for joint supervision of thesis Esposto / Statement form Esame finale / Final exam



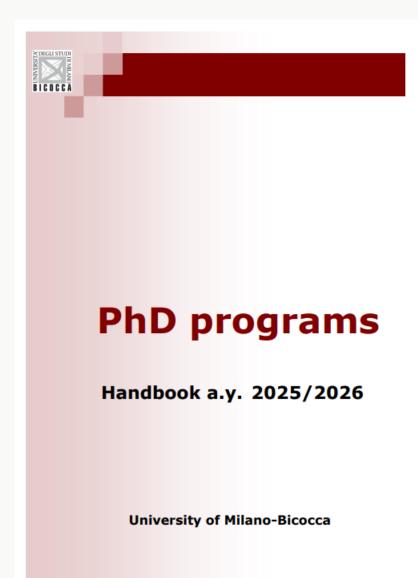
# **During your PhD: How** to







### **HANDBOOK**









**11 novembre 2025 ore 10:00** Aula Martini U6-04

**PhD representatives** 



PhD Student Representatives |

11/11/2025

Me the first year of my PhD versus now:





First year PhD Student



I can not wait to start writing my thesis.

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Final year PhD Student



I can not wait to finish writing this thesis.

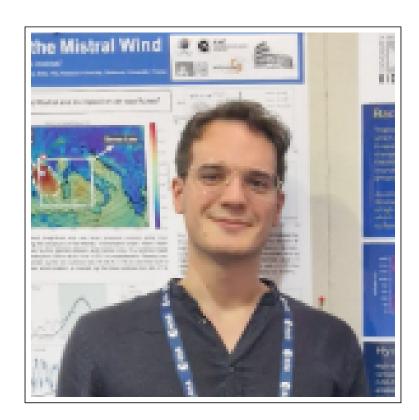
# WELCOME DAY

**PhD Students Representative** 

## TEAM



Marta Branda m.branda@campus.unimib.it



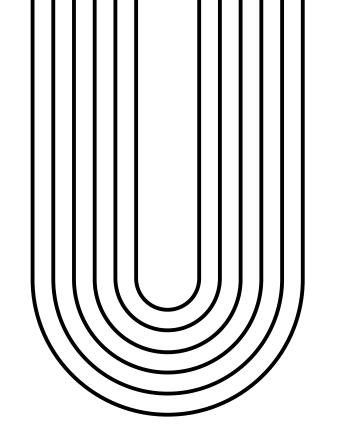
Andrea Davin
a.davin@campus.unimib.it



Alessia Testa
a.testa22@campus.unimib.it

### **ACTIVITIES**

We represent PhD students in the Doctorate School board and in the Students' council





Tackling general and common issues of the PhD

(Hopefully)



# Communicating important matters with you

Events or relevant changes through the mailing list

(first year students will be added soon)



# Organizing Social and Scientific events

To foster networking among students

## Goals

# WE ARE <u>CURRENTLY WORKING</u> ON IMPROVING PHDS STUDENTS WELLBEING THROUGH A SERIES OF ACTIONS AIMED AT

Improving the access (speed and accessibility) to personal research funding
Ensure <b>adequate workstations</b> to each student
Further investments in shared spaces for networking
Adoption of the <b>European Charter for Researchers</b>
Get housing help through rent support and additional residence spots
Increase the scholarship (though the help of national associations)

# HOW and WHEN can we help













## The PhD Survival Toolbox

### **Curiosity**

Follow the questions that excite you, explore ideas beyond your project, and take advantage of seminars, workshops, and visiting opportunities to broaden your perspective.



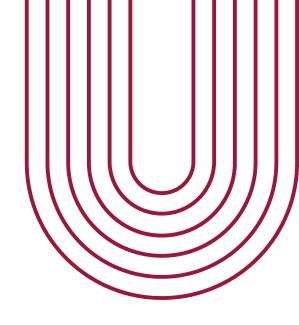
Not everything is equally urgent. Learn to identify high-impact tasks, break large goals into manageable steps, and protect your deep-work time.

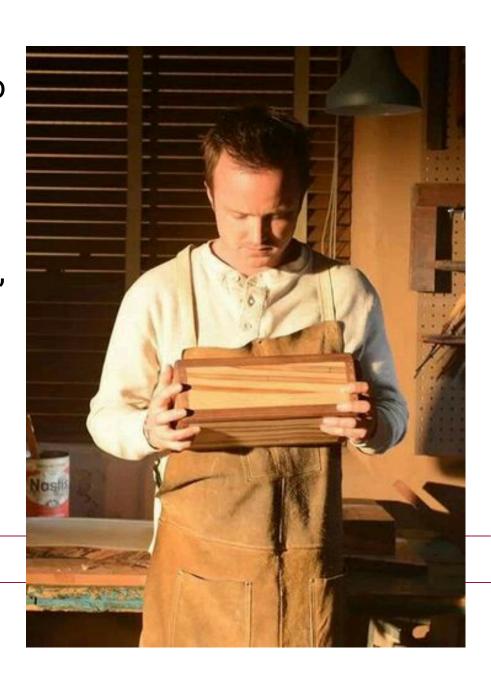
### **Well-being and Peer Support**

A PhD is a long journey: finding a sustainable rhythm, connecting with other PhD students, asking for help when needed, and building a supportive community are essential.

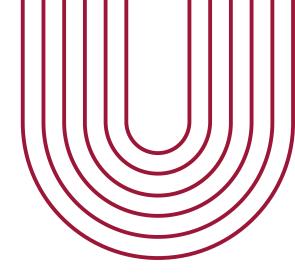
### **Networking**

Building relationships with peers, faculty, and external researchers opens doors to collaborations, projects, conferences, and future opportunities.





# The PhD is a journey (literally!): Our Visiting Period



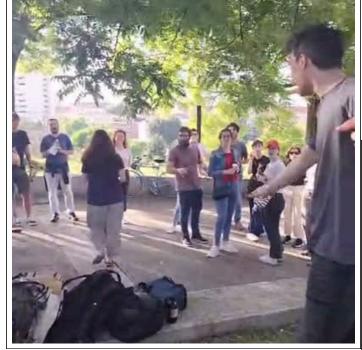
Marta is currently doing her visiting period at the OECD in Paris, working to an international survey about student and teacher well-being across 87 countries. She submitted an application in February 2025 for a position that matched her research interests, and this opportunity allowed her to gain first-hand experience in international research, see how data can influence policy over the world.

Alessia's collaborating on a research which focuses on how ostracism and group membership influence facial mimicry in children aged 2.5 years-old at the University of Essex. During her first year of her PhD she attended a conference where she was able to casually meet a Professor. While talking, they discovered that Alessia's PhD project aligned closely with the Professor's PhD student research interest. As they already had a research question in mind, this conversation sparked a cooperation on this new project.

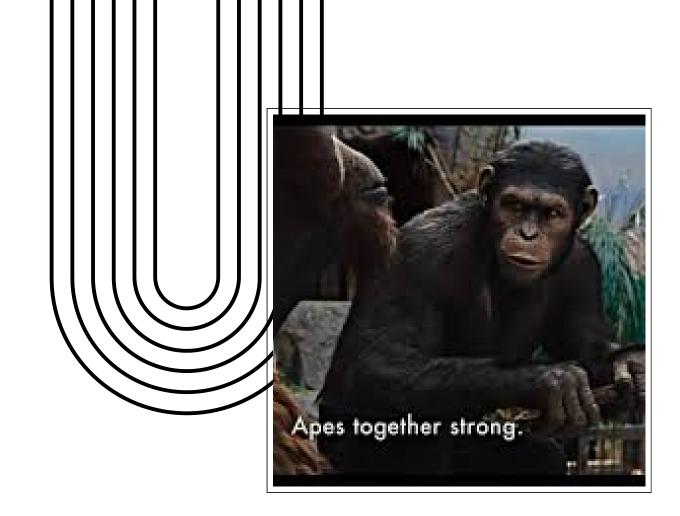
- Be open to opportunities don't expect a pre-set path.
- Explore and look around seek out new ideas and collaborations.
- Enjoy bad experiences they can teach you as much as good ones
- Integrate diverse experiences work across fields and contexts.
- Reflect and connect keep track of your experiences and build lasting networks.

# **Building Community**

### Fostering a network among students!







### PhD representatives - student network

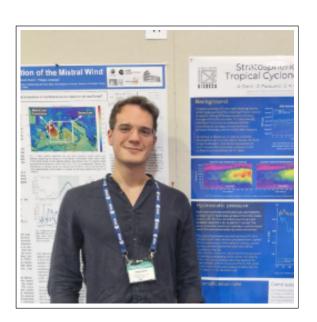
- Collected at least 1 contact from the representatives among different Departments
- Each course has 2 or more "departmental" representatives. They are the "first line" in case of issues specific of your course
- If you get elected as representative, please
   reach out so that we can involve you

# How can we help

#### **CONTACT US**



Marta Branda m.branda@campus.unimib.it



Andrea Davin

a.davin@campus.unimib.it

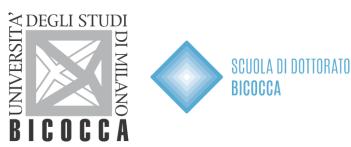


Alessia Testa

a.testa22@campus.unimib.it

YOU WILL ALSO BE ADDED IN A BIG MAILING LIST TO KEEP UP TO DATE WITH CHANGES AND EVENTS (WE PROMISE WE WON'T SPAM)





**11 novembre 2025 ore 10:00** Aula Martini U6-04

My period abroad Dr. Barbara Zerbato



# My ERASMU Sin Finland

**Barbara Zerbato** 

PhD candidate – XXXVIII Cycle

**Tampere University October 2024 – July 2025** 





### LIGHTS

- Personal growth
- Cultural enrichment
- Collaboration opportunities
- Career prospects
- International exposure

### SHADOWS







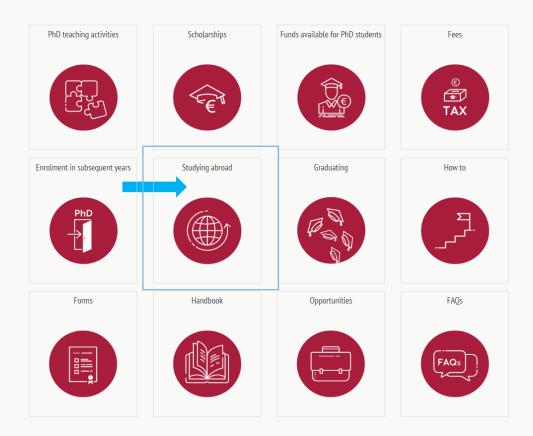


**11 novembre 2025 ore 10:00** Aula Martini U6-04

**Dr. Yuliia Danyltsova**PhD School office



### **STUDY ABROAD**



### **Research Periods Abroad**

min 3 – max 12 months abroad 50% increased scholarship

### Jointly supervised thesis

up to 18 months abroad50% increased scholarship



### Research Periods Abroad

**Duration & Benefits** 

PhD students can conduct training and research at foreign institutions for

- min 3 up to 12 months (18 months in case of Jointly supervised thesis).
- Scholarship increase by 50% for stays exceeding 30 consecutive days.

**Application Process** 

Submit the study abroad form to dottorati@unimib.it

- at least one month before departure,
- countersigned by the PhD Programme Coordinator
- with ID photocopy attached.

Scholarship payment

Send attendance certificate signed by foreign tutor to pagamenti.dott-spec@unimib.it by the 30th of each month to receive increased scolarship.





### Jointly supervised thesis

Joint supervision enables PhD students to obtain two PhD qualifications (diplomas) recognized in two countries through collaborative agreements.

PhD Student Proposal

Teaching Board approval

Signature of the Agreement

Period abroad (12 to 18 months) Final Exam with Committee of members from both universities







**11 novembre 2025 ore 10:00** Aula Martini U6-04

Proff. G. Mazzaglia, M. Malusà and L. Zecca



## PHD SCHOOL-UNIVERSITY OF MILANO BICOCCA WELCOME DAY

### INTERDISCIPLINARY COURSES



#### WELCOME DAY INTERDISCIPLINARY COURSE

#### INTERDISCIPLINARY COURSES – WHY



- To acquire skills beyond your research discipline (e.g., intellectual skills, communication skills, organizational skills, interpersonal skills, etc.)
- To become part of a multidisciplinary community (to interact with peers from heterogeneous research areas/cross disciplinary work)
- To promote your active involvement and participation
- To help you to prepare for a career within and outside academia



## OUR ASSUMPTION: INTERDISCIPLINARY COLLABORATION IS THE BASIS FOR ADVANCED EDUCATION

## Benefits of Interdisciplinary collaboration:

- Develops Critical Thinking skills
- Provides More In-Depth Perspectives (discuss multiple perspectives)
- Develops Creative Solutions
- Develops innovation
- Improves Communication Skills
- Facilitates dialogue
- Develops new networks
- Helps Prepare for a Career in a New and Emerging Field



### INTERDISCIPLINARY COURSES - WHAT

### WHAT DO WE OFFER YOU?

How to reach the webpage with courses from the University website?

https://www.unimib.it/didattica/dottorato-ricerca/scuola-dottorato/corsi-interdisciplinari/interdisciplinary-courses-syllabuses-and-class-schedule



### INTERDISCIPLINARY COURSES - WHAT

### WHAT DO WE OFFER YOU?

How to reach the webpage with courses from the University website?

https://elearning.unimib.it/course/index.php?categoryid=12141



**■** ACADEMIC YEAR 2025-2026

■ ACADEMIC YEAR 2024-2025

**■** ACADEMIC YEAR 2023-2024

**■** ACADEMIC YEAR 2022-2023

ACADEMIC YEAR 2021-2022

**=:** ACADEMIC YEAR 2020-2021

### OVERVIEW OF THE COURSES: 6 GROUPS

Green Competencies

Language and
Communication
Basic Skills

Basic
Technology
Skills

**Interdisciplinary Paths** 

Research Management,
Knowledge of Research System
and Funding System

Soft and Transferable Competences Within and Beyond Academia

### OVERVIEW OF THE COURSES (GROUP I)

### Language and Communication Basic Skills

- Communicating research in the Era of social media
- Scientific writing in human and social sciences
- Writing of scientific papers
- Basic principles of public relations and media relations for academics
- Philosophy of Artificial Intelligence and robotics





### COMMUNICATING RESEARCH IN THE ERA OF SOCIAL MEDIA

**Teacher(s):** Giuseppe Vizzari; **Credits:** 1 (8 h lectures)

**Objectives:** To provide a brief introduction to the topics of research dissemination:

- Short historical perspective on the communication of research
- Discussion on the relationship with mechanisms of funding research
- Current context and requirements on research dissemination and exploitation (from the funding agencies and political stakeholders)
- Current best practices, issues and opportunities
- Introduction to some relevant social media channels, both generalists and specifically aimed at the research community: their business model and controversies related to copyright infringement of shared papers



### LANGUAGE AND COMMUNICATION BASIC SKILLS

### COMMUNICATING RESEARCH IN THE ERA OF SOCIAL MEDIA

**Teacher(s):** Giuseppe Vizzari; **Credits:** 1 (8 h lectures)

### **Course structure:**

- two frontal lessons (6h)
- a practical exercise (potentially carried out in small groups of students) in the definition of a dissemination campaign
- public discussion of the proposals (at least 2h, based on the number of students undergoing evaluation)

Target audience: PhD students, best if in their first or second year

### LANGUAGE AND COMMUNICATION BASIC SKILLS

### SCIENTIFIC WRITING IN HUMAN AND SOCIAL SCIENCES

**Teacher(s):** Guido Veronese; **Credits:** 2 (16 h lectures)

### **Objectives:**

The module is aimed at introducing the very fundamentals of scientific writing. From how to select an excellent outlet to the correct ways how to produce an abstract (structured and unstructured) and a concept not, or proposal scientifically sounding.

### **Target audience:**

Students from human and social sciences disciplines and approaches are welcome. Some glimpses of bibliometric and not bibliometric approaches will also be provided.

### LANGUAGE AND COMMUNICATION BASIC SKILLS

### WRITING OF SCIENTIFIC PAPERS

Teacher(s): Marco Vanoni; Credits: 1 (8 h lectures)

### **Objectives:**

- How to read a scientific paper.
- The "write first-do-the-experiments-later" approach.
- How to structure a scientific paper

Hands-on and practical exercises: students will be asked to perform some tasks. For example, they will write an abstract, a cover letter or an introduction of a paper according to some specific suggestions. The material prepared by a few randomly selected students will be read and commented.

If possible, a lecture will be given by an editor of a journal of the Nature group

### LANGUAGE AND COMMUNICATION BASIC SKILLS

## BASIC PRINCIPLES OF PUBLIC RELATIONS AND MEDIA RELATIONS FOR ACADEMICS

Teacher(s): Emanuela Emilia Rinaldi; Credits: 1 (12 h

laboratory)

**Premises**:

### "Do it well and let people know about it"

This is should be one of the basic motto for academics but, sadly, sometimes the best papers or researches are hardly read outside the academia.

Why?

Often academics lack the basic principles of the science of Public relations (PR) and media relations, and think that journalists, bloggers, press office' and media centers' managers are individuals who are not "relevant" for those who works in academia.

### LANGUAGE AND COMMUNICATION BASIC SKILLS

# BASIC PRINCIPLES OF PUBLIC RELATIONS AND MEDIA RELATIONS FOR ACADEMICS

**Teacher(s):** Emanuela Emilia Rinaldi; **Credits:** 1 (12 h laboratory)

**Topics:** Overview of public relations principles and theories relevant to scholars and researchers; classical PR tools (from press release to mailing list management to visit cards) relevant to social and natural sciences in academia.

Analysis of the sociological concept of "habitus" of Pierre Bourdieu and its 3 capitals (social, economic, and cultural). Reflection upon one's own habitus.

Group or individual exercise to design a PR campaign aimed at increasing the own social capital inside and outside the academia.

Discussion of the project in front of the other classmates.

### LANGUAGE AND COMMUNICATION BASIC SKILLS



**Teacher(s):** Emanuela Emilia Rinaldi; **Credits:** 1 (12 h laboratory)

### **Objectives:**

- acquire basic knowledge about principles of Public Relations (PR) and Media Relations
- reflect upon one's personal habitus and how this affects one's academic career in terms of PR
- increase awareness about how PR can be useful inside and outside the academy;
- increase awareness about how Media relation can be useful inside and outside the academy;
- design a PR campaign to increase their social capital inside the academia

Target audience: PhD students, any year

### LANGUAGE AND COMMUNICATION BASIC SKILLS

### PHILOSOPHY OF ARTIFICIAL INTELLIGENCE AND ROBOTICS

**Teacher(s):** Edoardo Datteri, Daniela Besozzi, Marco Salvatore Nobile; **Credits:** 1 (12 h laboratory)

- A guide to go beyond "small talk" and address the main philosophical problems regarding Artificial Intelligence and robotics in a reasoned way
- **Laboratory**, **12** hours, 6 interactive lessons



### LANGUAGE AND COMMUNICATION BASIC SKILLS

## PHILOSOPHY OF ARTIFICIAL INTELLIGENCE AND ROBOTICS

**Teacher(s):** Edoardo Datteri, Daniela Besozzi, Marco Salvatore Nobile; **Credits:** 1 (12 h laboratory)

### **Objectives:**

Contemporary research in Artificial Intelligence (AI) and robotics gives rise to a large number of distinctive philosophical questions and dilemmas

- Can AI systems have a mind and develop consciousness?
- What does it mean for AI systems to learn?
- What data do Al systems use, and how do they use it, to generate predictive models?
- What kind of knowledge can predictive models provide about the world, and how can this knowledge be justified?

### LANGUAGE AND COMMUNICATION BASIC SKILLS

## PHILOSOPHY OF ARTIFICIAL INTELLIGENCE AND ROBOTICS

**Teacher(s):** Edoardo Datteri, Daniela Besozzi, Marco Salvatore Nobile; **Credits:** 1 (12 h laboratory)

### **Objectives:**

Contemporary research in Artificial Intelligence (AI) and robotics gives rise to a large number of distinctive philosophical questions and dilemmas

- Can robotic models of living organisms be used as experimental tools in the life sciences?
- What kind of explanations should explainable AI systems provide?
- How can we trust Al and robotic systems?
- How can we ethically evaluate their behavior and assign responsibility for their actions?

### LANGUAGE AND COMMUNICATION BASIC SKILLS



### PHILOSOPHY OF ARTIFICIAL INTELLIGENCE AND ROBOTICS

**Teacher(s):** Edoardo Datteri, Daniela Besozzi, Marco Salvatore Nobile; **Credits:** 1 (12 h laboratory)

These and other questions pertain to different branches of philosophy, including epistemology, philosophy of science and moral philosophy, and are increasingly at the center of the public debate on artificial intelligence and robotics. They will be partially addressed in this course.

The lessons will be highly interactive and intended for doctoral students from fields other than philosophy and without a philosophical background. Philosophical debates will be organized and encouraged, also with the help of invited lectures by leading experts in the various sectors covered.

Target audience: PhD students from all the courses offered in Bicocca

### OVERVIEW OF THE COURSES (GROUP 2)

### Basic Technology Skills

- Introduction to statistics with R (part I): data description and basic inference
- Introduction to statistics with R (part II): linear and logistic regression models
- Productivity tools for (young) researchers
- Literature review: using the best searching tools
- Literature review: managing and evaluating your bibliography

### **BASIC TECHNOLOGY SKILLS**

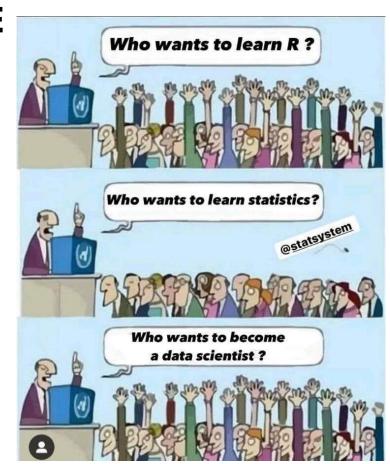
### INTRODUCTION TO STATISTICS WITH R (PART I): DATA DESCRIPTION AND BASIC INFERENCE

Teacher(s): Davide Bernasconi; Credits: 2 (16 h

Objectives: The course, through lectures and computer lab sessions, aims to provide basics notions of statistics to plan and analyze the results of a scientific study or experiment.

At the end of the course, the participants should be able to:

- choose the most suitable design for their study
- compute the optimal sample size
- perform a graphical and tabular description of the data
- analyze the association between variables through proper measures and hypothesis testing



### **BASIC TECHNOLOGY SKILLS**

# INTRODUCTION TO STATISTICS WITH R (PART I): DATA DESCRIPTION AND BASIC INFERENCE

Teacher(s): Davide Bernasconi; Credits: 2 (16 h

lectures)

### Course program

- Day I: Introduction to R language;. Data summaries: descriptive measures and graphical representations.
   Lab session with R
- Day 2: Introduction to hypothesis testing. Parametric tests for quantitative variables. Lab session with R
- Day 3: Non-parametric tests for quantitative variables. Tests for categorical variables. Lab session with R
- Day 4: Correction for multiple comparisons. Sensitivity, specificity and ROC curve. Lab session with R

**Target audience:** Doctoral students of any discipline who are interested in the practical application of basic statistical methods for data analysis in scientific research

### **BASIC TECHNOLOGY SKILLS**

# INTRODUCTION TO STATISTICS WITH R (PART II): LINEAR AND LOGISTIC REGRESSION MODELS

Teacher(s): Davide Bernasconi; Credits: 1 (8 h

Objectives: The course, through lectures and computer lab sessions, aims to illustrate the fundaments of statistical modeling with multiple covariates focusing on the linear and logistic regression models.

At the end of the course the participants should be able to:

- recognize when to perform a linear or logistic regression
- check the validity of the assumptions required
- fit the model to the data
- correctly interpret the model coefficients and evaluate the goodness of fit

### **BASIC TECHNOLOGY SKILLS**

# INTRODUCTION TO STATISTICS WITH R (PART II): LINEAR AND LOGISTIC REGRESSION MODELS

**Teacher(s):** Davide Bernasconi; **Credits:** 1 (8 h lectures)

### **Course program**

Day 1: Correlation and simple linear model. Multiple linear model. Lab session with R

Day 2: Introduction to generalized linear models. Logistic regression model. Lab session with R

### **Target audience:**

Doctoral students of any discipline who are interested in the practical application of basic statistical modeling for data analysis in scientific research

### BASIC TECHNOLOGY SKILLS

### PRODUCTIVITY TOOLS FOR (YOUNG) RESEARCHERS

**Teacher(s):** Andrea Mangiatordi; **Credits:** 1 (8 h lectures)

**Objectives:** The course main objective is to introduce participants to some personal productivity tools and techniques that are either closely related to academic work (i.e., managing a personal reference library and staying on top of it) or general-purpose project management techniques, including decluttering tips and a review of personal productivity methods.

Pre-existent, unstructured knowledge of the topics of the course will be turned into solid and interconnected understanding of how cloud-based tools can support everyday research activities and basic data management to decrease the risk of (excessive) redundancy in personal information management.

### **BASIC TECHNOLOGY SKILLS**

### PRODUCTIVITY TOOLS FOR (YOUNG) RESEARCHERS

**Teacher(s):** Andrea Mangiatordi; **Credits:** 1 (8 h lectures)

Participants will acquire skills related to specific software tools, becoming able to install and configure them, to set up personalized productivity environments in support of their careers as early-stage researchers.

Participants will learn how to

- build their own reference collection;
- manage and track tasks and time usage, individually or in small groups;
- collect information in the form of heterogeneous notes and systematically store and manage them;
- orchestrate the use of different web tools to their advantage

### **BASIC TECHNOLOGY SKILLS**

### PRODUCTIVITY TOOLS FOR (YOUNG) RESEARCHERS

**Teacher(s):** Andrea Mangiatordi; **Credits:** 1 (8 h lectures)

### **Target audience:**

First-year doctoral students of any course of study. Doctoral students from later years may also participate, although introducing the elements seen in the course after research has already begun may be more difficult. But it's never too late actually:)

The course will begin in December 2025 in hybrid mode. Face-to-face classes will be streamed via Webex and recorded for later reference.

It will be possible to participate and submit the online quiz until March 2026.

### **BASIC TECHNOLOGY SKILLS**

### LITERATURE REVIEW: USING THE BEST SEARCHING TOOLS

**Teacher(s):** Stefania Fraschetta, Margherita Zambotto; **Credits:** 1 (12 h laboratory)

### **Objectives:**

To know and to use online tools for bibliographic research, with a special focus on the University Library's discipline-specific tools (databases, search engines, open archives etc.)

At the end of the course students will be able to:

- Identify and select the most authoritative and relevant sources for their subject

### **Target audience:**

First and second year doctoral students



NEED HELP?
BIBLIOELEARNING@UNIMIB.IT

### **BASIC TECHNOLOGY SKILLS**

## LITERATURE REVIEW: MANAGING AND EVALUATING YOUR BIBLIOGRAPHY

**Teacher(s):** Stefania Fraschetta, Margherita Zambotto; **Credits:** 1 (12 h laboratory)

### **Objectives:**

- to know and to use online tools for bibliographic research, with a special focus on the University Library's discipline-specific tools
- Interpret bibliometric indicators and recognize the pros and cons.
- Cite sources correctly and manage complex bibliographies using reference managers.

### **Target audience:**

Second and third year doctoral students



NEED HELP?
BIBLIOELEARNING@UNIMIB.IT

### OVERVIEW OF THE COURSES (GROUP 3)

# Soft and Transferable Competences Within and Beyond Academia

- Design thinking and innovation planning
- The Appropriate Leadership. A sustainable approach to inclusive leadership in diverse contexts
- Giovani & Impresa
- Transferable competences and professional transitions

## SOFT AND TRANSFERABLE COMPETENCES WITHIN AND BEYOND ACADEMIA



### **DESIGN THINKING AND INNOVATION PLANNING**

**Teacher(s):** Elisabetta Marafioti, Mattia Martini; **Credits:** 1 (12 h laboratory)

Program: Introduction to design thinking. Design thinking process and tools.

**Objectives:** to allow students to build the first prototype of their business idea based on a design thinking approach.

After completion of the course, PhD students will be able to:

- understand and master the design thinking approach
- use design thinking for the development of a basic innovation planning

Participants will be involved in a design thinking session and will share and discuss with the group the **results obtained.** 

Target audience: PhD Students

## SOFT AND TRANSFERABLE COMPETENCES WITHIN AND BEYOND ACADEMIA

# APPROACH

# THE APPROPRIATE LEADERSHIP. A SUSTAINABLE APPROACH TO INCLUSIVE LEADERSHIP IN DIVERSE CONTEXTS

Teacher(s): Ida Castiglioni; Credits: 1 (8 h lectures)

**Objectives:** This workshop addresses the many challenges leaders have to face when operating in a diverse, often international context

Efficacious leadership is not "one size fits all":

leading a diverse team means being able to value difference and provide appropriate guidance according to different expectations

Leaders need to recognize their own and others preferred perceptual styles and their embodied experience of those styles in order to create strategies and tactics for translating inclusivity into sustainable innovation

## SOFT AND TRANSFERABLE COMPETENCES WITHIN AND BEYOND ACADEMIA



# THE APPROPRIATE LEADERSHIP. A SUSTAINABLE APPROACH TO INCLUSIVE LEADERSHIP IN DIVERSE CONTEXTS

Teacher(s): Ida Castiglioni; Credits: 1 (8 h lectures)

- The workshop will provide opportunities for apprehending new frameworks and reflecting on personal and professional experience in order to make their work more impactful and globally responsible
- It will use a developmental rather than transformative approach to the notion of change and difference
- Leaders need to acquire a fresh perspective for carving their own unique leadership in terms of "appropriateness" to context and learn how to become facilitators of a new, encompassing vision

## SOFT AND TRANSFERABLE COMPETENCES WITHIN AND BEYOND ACADEMIA



# THE APPROPRIATE LEADERSHIP. A SUSTAINABLE APPROACH TO INCLUSIVE LEADERSHIP IN DIVERSE CONTEXTS

Teacher(s): Ida Castiglioni; Credits: 1 (8 h lectures)

### **Target audience:**

- The more different backgrounds of doctoral students, the better.
- This is a cross-competence any Ph.D. should have to be able to play in the international arena. Students will be challenged to work together starting from their different disciplinary context.
- Ideally participants should be at their second/third year of their Ph.D. program.

  Notes: The course is highly interactive, in presence, and will need full attendance

## SOFT AND TRANSFERABLE COMPETENCES WITHIN AND BEYOND ACADEMIA

## GIOVANI & IMPRESA Teacher(s): Fondazione Sodalitas; Credits: 2 (16 h lectures)

### The course is held in Italian

Cultura d'impresa nell'ottica della Responsabilità Sociale e della Sostenibilità, secondo gli indirizzi Europei e del MIUR, con l'obiettivo di valorizzare vocazioni e attitudini che distinguono le eccellenze dei giovani, come valore aggiunto delle competenze trasversali.

- L'Impresa e l'orientamento agli Stakeholders
- La creazione del valore
- La responsabilità sociale d'Impresa e la sostenibilità
- La Comunicazione assertiva e le relazioni interpersonali
- Il lavoro di squadra e la motivazione
- Mercato, innovazione e competizione
- Il Curriculum Vitae come strumento di "appeal" personalizzato per destinazione
- Simulazione di colloqui

## SOFT AND TRANSFERABLE COMPETENCES WITHIN AND BEYOND ACADEMIA

## TRANSFERABLE COMPETENCES AND PROFESSIONAL

TRANSITIONS Teacher(s): Andrea Galimberti; Credits: 1 (8 h lectures)

- Introduction to transferable skills theme as outlined in international policies: students will connect concepts and categories to their experiences
- Most common assumptions underlying the discourse on competence and their practical effects: students will reflect over them in a critical way
- Schemes based on different ways of profiling competences are provided, to allow experimenting the assumptions in a practical way
- International research results related to PhDs' professional transitions and existing supportive actions will be socialized among participants and connected to personal experiences through auto/biographical methods.

## SOFT AND TRANSFERABLE COMPETENCES WITHIN AND BEYOND ACADEMIA

# TRANSFERABLE COMPETENCES AND PROFESSIONAL

## **Objectives:**

**TRANSITIONS** 

- increase awareness about future professional scenarios outside the academy;
- reflect about the transferable skills issue: one of the main strategy outlined by international policies to deal with professional transitions;
- share experiences of professional transitions outside the academy based on international research works;
- invite students to connect with other PhD holder experiences and strategies to their specific situation;

**Teacher(s):** Andrea Galimberti; **Credits:** 1 (8 h lectures)

 share with students existing national and international projects aiming at supporting them in professional transitions

Suggested year of attendance: second and third years

### OVERVIEW OF THE COURSES (GROUP 4)

# Research Management, Knowledge of Research System and Funding System

- International or foreign strategies, patent rights, employees and researchers' intellectual property rights
- Open Access publishing: a guide
- Surfing the academic job market: how to publish in high impact international journals
- Introduction to grant writing
- Project management at work

# WELCOME DAY INTERDISCIPLINARY COURSE RESEARCH MANAGEMENT, KNOWLEDGE OF RESEARCH SYSTEM AND FUNDING SYSTEM

# INTERNATIONAL OR FOREIGN STRATEGIES, PATENT RIGHTS, EMPLOYEES AND RESEARCHERS' INTELLECTUAL PROPERTY RIGHTS

Teacher(s): Miriam Loro Piana, Matteo Di Lernia; Credits: 1 (8 h

**Objectives:** The seminar aims at providing the students with a specific knowledge on the main patent filing options and strategies, the exclusive rights granted by a patent and the employees and researchers' rights on the inventions realized during their work relationship with private and public entities.

### Expected outcome:

- identify pros and cons of the different patent filing options;
- clear understanding of the scope of protection of a patent;
- legal framework of the employees and researchers' intellectual property rights and awareness of the risks deriving from a bad drafted employees' contract.



# INTERNATIONAL OR FOREIGN STRATEGIES, PATENT RIGHTS, EMPLOYEES AND RESEARCHERS' INTELLECTUAL PROPERTY RIGHTS

**Teacher(s):** Miriam Loro Piana, Matteo Di Lernia; **Credits:** 1 (8 h lectures)

#### **Table of contents:**

International or foreign patent filing strategies: Italian patent application, European patent application and PCT patent application: timing and costs;

Rights conferred by patents (moral rights and property rights) and scope of protection;

Employees and researchers' rights on inventions: focus on Art. 64 and Art. 65 of the Italian Industrial Property Code and International perspective.

The workshop will be based on interactive lecture and case studies.



# **OPEN ACCESS PUBLISHING: A GUIDE**

**Teacher(s):** Francesca Verga, Stefania Fraschetta; **Credits:** 1 (8 h lectures)

# Many questions on OA publishing...

What do people mean by Open Access and Open Science?

My publisher says I must choose between CC-BY and CC-BY-NC, what does it mean?

I want to participate in a European Project, do I have to comply with Open Science?

This website is huge, where do I find information about OA requirements for articles and data?

What's a hybrid journal?



## **OPEN ACCESS PUBLISHING: A GUIDE**

**Teacher(s):** Francesca Verga, Stefania Fraschetta; **Credits:** 1 (8 h lectures)

# Many questions on OA publishing...

How to check which journals are compliant with EU publishing requirements?

I've always wanted to publish in a famous journal, but it does not meet the criteria for EU OA funding. What can I do?

This journals seems promising, but I have never heard of it. Can I trust it or not?

Can I get a discount on my APCs?

Where can I self-archive my article? And my data?

Is there any data out there I can reuse for my project?

# **OPEN ACCESS PUBLISHING: A GUIDE**

Teacher(s): Francesca Verga, Stefania Fraschetta; Credits: 1 (8 h lectures)

# **Objectives**

At the end of the course students will be able to:

- Distinguish between different types of OA and CC licenses
- Retrieve information about OA publishing requirements for EU projects
- Have the necessary information to choose the right journal and license for their research articles
- Have an overview of Open Access services available in Bicocca
- Retrieve open access literature from the main subject specific repositories



# **OPEN ACCESS PUBLISHING: A GUIDE**

**Teacher(s):** Francesca Verga, Stefania Fraschetta; **Credits:** 1 (8 h lectures)

# **Target audience:**

Doctoral students at the end of their programme.

Participants must have already chosen their research subject or research question for their doctoral thesis with their tutor.

### **Notes:**

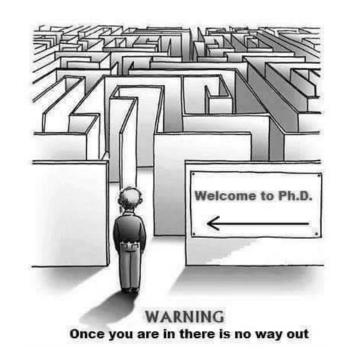
To be awarded the CFU, participants must have completed all the online lessons and activities, including the final activity, and have contributed to each forum discussion.

# SURFING THE ACADEMIC JOB MARKET: HOW TO PUBLISH IN HIGH IMPACT INTERNATIONAL JOURNALS

Teacher(s): Marco Brambilla; Credits: 1 (8 h lectures)

**Aims:** The workshop aims at giving students basic skills in order to write and submit a scientific paper. Beside addressing the key paper sections, the workshop aims at giving basic skills to select the best journal, manage citations and de-bases measuring the quality and the impact of the scientific production.

Suggested year of attendance: Ist year





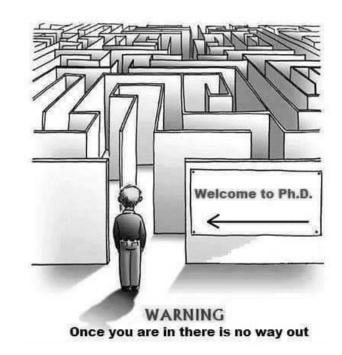
Teacher(s): Marco Brambilla; Credits: 1 (8 h lectures)

#### Table of contents:

- Selecting the right journal: Impact factor and new measures of influence, journal aims, type of papers published

HIGH IMPACT INTERNATIONAL JOURNALS

- Writing key sections: Title, abstract, introduction, method, results, and discussion
- Writing strategies
- Submission and re-submission
- Dos and Don'ts of manuscript submission
- The review process
- Ethical issues in publishing



### INTRODUCTION TO GRANT WRITING

Teacher(s): Gianfranco Pacchioni, Mizar Luca Federici, Fiorenza de Micheli Credits: 1 (8 h lectures)

Objective of the course is:

- Teach the basic skills of Grant Writing
- Provide an overview of the European projects landscape
- Introduce basic strategies and tools to search for forthcoming calls (e.g., EU Funding&Tender portal)

The course is preceded by a lesson in which some aspects of contemporary science will be illustrated and discussed, from excessive competition for re-search funds and academic positions, to the constant growth of publications, from the uncritical use of bibliometric indexes to ethically questionable behavior.



# INTRODUCTION TO GRANT WRITING

**Teacher(s):** Gianfranco Pacchioni, Mizar Luca Federici, Fiorenza de Micheli **Credits:** 1 (8 h After the course, the candidates will be able to approach a project proposal according to the standard sections required by most of the proposal templates, including in particular:

- Objectives
- Methodology including transversal aspects
- Workplan including Work Packages, Tasks, Deliverables, Milestones
- Impact
- Communication, Dissemination, Exploitation
- Project Management
- FAIR DAta Management elements
- Open Science Practices outline

Target audience: Ph.D students (preferably 3rd year, not binding)



# PROJECT MANAGEMENT AT WORK

**Teacher(s)**: Marta Jakob **Credits**: 1 (12 h laboratory)

# Overview of project management and building of the toolbox

Starting from the principles of project management, the lab will focus on recollection of the tools that can be useful in a project approach that often are already in use on a daily basis, starting from the activity planning up to project design; the module will give the main definitions of project: scope, deliverables, resources, milestones, etc. creating a common knowledge base.

Keywords: knowledge base, project charter, WorkBreakdownStructure, matrixes, budget.



# PROJECT MANAGEMENT AT WORK

**Teacher(s)**: Marta Jakob **Credits**: 1 (12 h laboratory)

### The impact of the project and the background involvement

Every project has a purpose that the project manager has to translate in a scope (impact, effectiveness, sustainability, etc.) that must be measurable; moreover, the project has to interact with a complex system of different subjects, the understanding of the context is a fundamental step for project building.

Keywords: project scope, impact, relevance, general objective, specific objectives, results, SMART, stakeholders, partners and suppliers (procurement)



# PROJECT MANAGEMENT AT WORK

**Teacher(s)**: Marta Jakob **Credits**: 1 (12 h laboratory)

### How financing project works

The project is often assembled with the purpose of obtaining a financial (partial or total) coverage; the class will focus on an overview of EU and other institution offering financial aid for projects, how the financing works, where to find opportunities, which activities can be funded and how to build a sound project budget.

Keywords: Financial project management skills, EU and other institution opportunities, grant vs loan, co-financing, budget building, project cost coverage.



# PROJECT MANAGEMENT AT WORK

**Teacher(s)**: Marta Jakob **Credits**: 1 (12 h laboratory)

## **Project workshop**

After becoming familiar with project management tools, the class will focus on identifying one or more project, call for proposal or tender bid; the participants will be grouped and will work on a short abstract of project idea, will discuss their ideas and will be asked to prepare a project outline, with envisaged results, a rough action plan and budget.

Putting in use the main tools: identification of interesting projects, building of a project charter, comparison of strengths and weaknesses, choice of the best project.

# OVERVIEW OF THE COURSES (GROUP 5)

# **Interdisciplinary Paths**

- Topics in contemporary public philosophy
- Reading the world through gendered lens: a methodological reflection (RRI gender equalities)
- Scientific method: the fundamental concepts

# INTERDISCIPLINARY PATHS



Teacher(s): Claudia Baracchi, Vittorio Morfino, Marco Vanzulli, Mario Vergani; Credits: 2 (16 h

Four lessons that seek to show the breadth of philosophy, developing a theme of aesthetics, one of ethics, one of political philosophy and one of philosophy of society and which intend to stimulate discussion with the people present at the meetings.

Mario Vergani. Ethics. Responsibility Profiles and Research.

The lecture will allow to discuss the different aspects of responsibility between general ethics and applied ethics. How is the concept of responsibility developed philosophically? How do personal and collective responsibility differ and intertwine? How do they relate to moral, legal, social and political responsibility? How these aspects affect epistemological responsibility, i.e. the responsibility of the researcher?



### TOPICS IN CONTEMPORARY PUBLIC PHILOSOPHY

Teacher(s): Claudia Baracchi, Vittorio Morfino, Marco Vanzulli, Mario Vergani; Credits: 2 (16 h lectures) Marco Vanzulli

# Society. The Gift as a Social Fact. A Marxist Critique of Prevalent Gift Theories

Understood by anthropology as a phenomenon situated between ethics, politics, and economics and studied in archaic societies, the exchange of gifts, the gift, is a social phenomenon whose study has enjoyed a certain success, even a certain vogue, starting with Marcel Mauss's Essai sur le don. Through a critique of the most widespread interpretations of this phenomenon, we will attempt to grasp its theoretical significance and reframe its value in light of a Marxist analysis. In the background, another concept stands out as essential to understanding historical societies: that of work.

# INTERDISCIPLINARY PATHS



Teacher(s): Claudia Baracchi, Vittorio Morfino, Marco Vanzulli, Mario Vergani; Credits: 2 (16 h

Vittorio Morfino Politics: The marxist tradition against the grain

The classes will explore the concept of "plural temporality" within the Marxist tradition, counterposing it to the linear, stadial, and progressive view of history. Physics will be used as a starting point to introduce the idea of a multiplicity of coexisting times, in a second step analyzing how this plurality emerges as a symptom of inadequacy in Marx's own thinking and in later authors such as Bloch, Gramsci and Althusser. The goal is to deconstruct a deterministic philosophy of history in order to think about the complexity, contingency, and intertwining of historical times, thus opening up new spaces for emancipatory political action.

### INTERDISCIPLINARY PATHS



**Teacher(s):** Claudia Baracchi, Vittorio Morfino, Marco Vanzulli, Mario Vergani; **Credits:** 2 (16 h lectures)

Claudia Baracchi. Art, Sensibility, and the Pathos of Knowledge.

The lecture will inceptively undertake to cast light on art as a mode of exploration, disclosure, and discovery—as a path to knowledge no less than the disciplines of scientific reason. The second part of the presentation will address the experience of theater and its potential for individual as well as communal formation. Sharing the experience of spectatorship (we'll watch a theatrical piece together) will provide the backdrop for an open discussion.

# INTERDISCIPLINARY PATHS

# READING THE WORLD THROUGH GENDERED LENS: A METHODOLOGICAL REFLECTION

Teacher(s): Sveva Magaraggia, Carmen Leccardi et alii; Credits: 2 (16 h lectures)

**Objectives.** The seminars and lectures will examine the issue of gender from a plurality of approaches and points of view.

First seminar: the concept of gender, its origins and changes in time, as well as its implications in relation to cultural, social and political analysis. Feminist research methods will be presented and discussed throughout the seminar.

Second seminar: the (trans)formative quality of feminist-critical-dialogic pedagogies, and a pedagogy of discomfort/difference, from the point of view of adult education, identity building and a practical theory of learning, both in formal and informal contexts.

# INTERDISCIPLINARY PATHS



Teacher(s): Sveva Magaraggia, Carmen Leccardi et alii; Credits: 2 (16 h lectures)

Third seminar: evolution of legal frameworks concerning gender equality, with a particular emphasis on constitutional principles and their interpretation in constitutional jurisprudence and case law; gender-based economic inequalities, causes and their negative impact on productivity and economic growth.

Fourth seminar: phenomenology and its application to gender; the seminar will show that concepts of "sex" and "gender" can be fruitfully examined and revised in the light of phenomenological concepts — "physical body" and "living body", "body schema" and "body image", "ownership and agency". Issues related to discrimination through images from the disciplinary perspective of communication design.

Target audience: all PhD Students



# SCIENTIFIC METHOD: THE FUNDAMENTAL CONCEPTS

**Teacher(s):** Edoardo Datteri; **Credits:** 1 (8 h lectures)

# Are you really contributing to the growth of scientific knowledge?

- An opportunity for you to reflect on key questions concerning the foundations of science from the perspective of the philosophy of science
- What is science (as opposed to non-science, pseudo-science, bad science)?
- What role do observation and experiments play in science?
- What does it mean to **explain** and **understand** a phenomenon?
- What does it mean to be **objective**?
- No prerequisites
- Interactive lessons, reading of important essays
- Open to «hard» and «soft» scientists (this distinction will be questioned!)

# OVERVIEW OF THE COURSES (GROUP 6)

# **Green Competencies**

- Introduction to multidisciplinary aspects of sustainability
- Cultural aspects of the climate crisis: meanings, denials and desires of environmental relatedness
- Realising the Green Transition
- Basic of biobased processes and biorefineries
- Advanced Human Ecology: The Concept of Sustainability through the lens of Historical Sciences

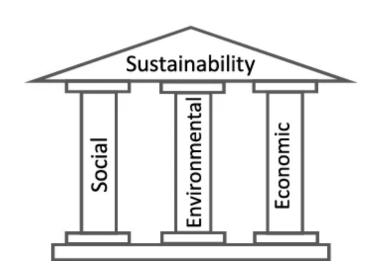
### **GREEN COMPETENCIES**

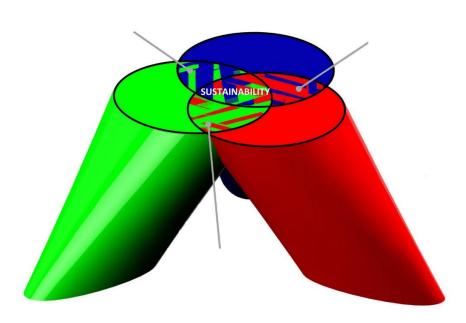
# INTRODUCTION TO MULTIDISCIPLINARY ASPECTS OF SUSTAINABILITY

Teacher(s): Emilio Padoa-Schioppa, Matteo Colleoni, Patrizia Steca, Andrea Galimberti; Credits: 2 (16

Objectives: The aim of the course is to provide a transdisciplinary introduction to the

concepts of sustainability.





### **GREEN COMPETENCIES**



# INTRODUCTION TO MULTIDISCIPLINARY ASPECTS OF SUSTAINABILITY

Teacher(s): Emilio Padoa-Schioppa, Matteo Colleoni, Patrizia Steca, Andrea Galimberti; Credits: 2 (16

**Objectives:** The aim of the course is to provide a transdisciplinary introduction to the concepts of sustainability.

# Part I (Emilio Padoa-Schioppa) Concept of sustainability

The Anthropocene epoch; Scientific approaches to sustainability epoch; Ecosystem services and Ecological footprint evaluation

## Part 2 (Andrea Galimberti) Social justice and social inclusion

Sustainability, social justice and social inclusion; Sustainability and Education: policies, strategies and practices

### **GREEN COMPETENCIES**



# INTRODUCTION TO MULTIDISCIPLINARY ASPECTS OF **SUSTAINABILITY**

**Teacher(s):** Emilio Padoa-Schioppa, Matteo Colleoni, Patrizia Steca, Andrea Galimberti; **Credits:** 2 (16) h lectures)

Part 3 (Matteo Colleoni) Strategies for no-carbon and sustainable infrastructures and mobility in urban environments

International context of policies against climate change; Decarbonisation of the transport system; Strategies and policies for the decarbonisation of transport

Part 4 (Patrizia Steca) Sustainability in social sciences

Promoting sustainability through behavioral interventions;

Conclusions (all) Sustainability and research Short discussion of students (to organize/reading different papers about this theme and presenting some output)

# **GREEN COMPETENCIES**

# INTRODUCTION TO MULTIDISCIPLINARY ASPECTS OF SUSTAINABILITY

Teacher(s): Emilio Padoa-Schioppa, Matteo Colleoni, Patrizia Steca, Andrea Galimberti; Credits: 2 (16

**Target audience:** PhD students with not specific knowledge or skills in sustainability sciences, but that are interested in understanding how a transdisciplinary approach can leverage the change of paradigm needed to match sustainability goals.

Notes: The course style will be process-oriented and interactive. Theoretical inputs will be followed by exercises, partner work, role-plays, case studies and group-work, when appropriate. Each lesson will have focus on specific topic, with hooks with all the others. The language and the level of details will be tailored to the specific needs of the actual audience; in case of lack of basic elements or knowledge, these will be provided either by the lecturer or by providing PhD students with specific documents. During the lessons participants will receive references to the literature needed and vision papers, as well as suggestions of relevant platforms and websites that can be useful.

# GREEN COMPETENCIES



Teacher(s): Mauro Van Aken; Credits: 1 (8 h lectures)

**Objectives:** Climate changes are a definitely a geophysical dynamic but represent a very cultural and social issue in their impacts, causes and emotional dimensions. Departing from anthropological perspective, combined with tools of different disciplines of the human sciences that are reshuffling the nature/culture divide of modern carbon economy, we will analyze together the multiple cultural and symbolical aspect of environmental relatedness in different societies. This will allow to tackle issues, at the center of research in the Anthropocene, as cultural models of the environmental relatedness, fossil cultures, its symbolical apparatus and complicities, cultural processes of denial and the social relations with/in the atmosphere.

Target audience: Transversal to all schools of PhD

# GREEN COMPETENCIES

# REALISING THE GREEN TRANSITION

Teacher(s): Heiko Lange, Elena Collina; Credits: 1 (8 h lectures)

# **Objectives**

The short, intense course will generate awareness regarding opportunities and challenges correlated to the process of implementing sustainability in industries and societies, i.e., fostering the postulated 'green transition'. The last decade has generated a huge amount of knowledge regarding sustainable use of resources, energies and processing. Implementation of this knowledge requires an awareness and common fundamental knowledge of associated theoretical and practical aspects across various scientific areas and fields, requiring a close networking between natural sciences, sociology, economy and law in shortest time frames.

# **GREEN COMPETENCIES**

# REALISING THE GREEN TRANSITION



13 CLIMATE ACTION









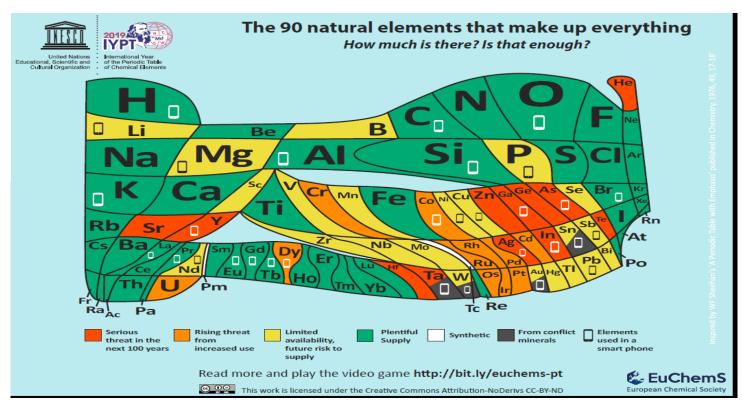
















14 LIFE BELOW WATER















# GREEN COMPETENCIES

# REALISING THE GREEN TRANSITION

Teacher(s): Heiko Lange, Elena Collina; Credits: 1 (8 h lectures)

The following points will be exemplary covered:

- Greenness vs. sustainability vs. economic viability
- Intercept points of biorefinery concepts with current industrial production schemes
- Modern energy harvesting and storage options
- Business models connected to exploiting renewable resources
- Concept of carbon footprint and methods for quantification
- Tools for monitoring impact of exploitation of renewable and sustainable re-sources and energies on current business models



### **GREEN COMPETENCIES**

# REALISING THE GREEN TRANSITION

Teacher(s): Heiko Lange, Elena Collina; Credits: 1 (8 h lectures)

#### Notes

The topics will be treated also in form of case studies: short introduction into the case by the lecturer, followed by elaboration of the cases in teamwork, presentation/discussion of results.

The language and the level of details will be tailored to the specific needs of the actual audience that will be evaluated at the beginning of the course; eventual knowledge differences will be accounted for by immediate interventions by the lecturer and in form of background material made available via the e-learning platform prior to the lectures.

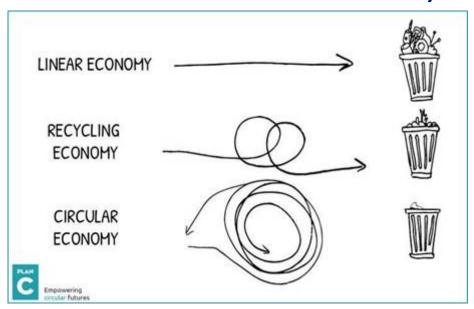
Active participation in group work and during final discussion of cases is required for successful participation.

### **GREEN COMPETENCIES**

### BASIC OF BIOBASED PROCESSES AND BIOREFINERIES

Teacher(s): Paola Branduardi; Credits: 1 (8 h lectures)

Changing the paradigm: from linear to circular economy



What is a biomass? Which can be considered sustainable?

What is a biorefinery? In how many way biomass can be valorised in a biorefinery?

What is the cascading principle?

Recycling, up-cycling, rethinking: what behind these terms?

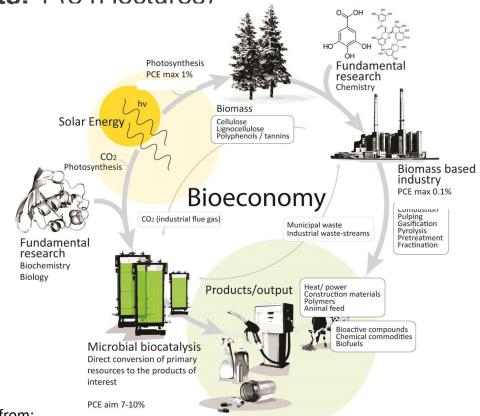
### **GREEN COMPETENCIES**



Teacher(s): Paola Branduardi; Credits: 1 (8 h lectures)

# The main goals:

- learning how biobased processes can favor the transition from linear to circular bioeconomy;
- acquiring the concept of biorefinery and which are the sustainable resources of the Earth;
- learning how bioprocesses can help to match principles and achievements of the 17 SDGs and of the Green Deal guidelines



Adapted from:

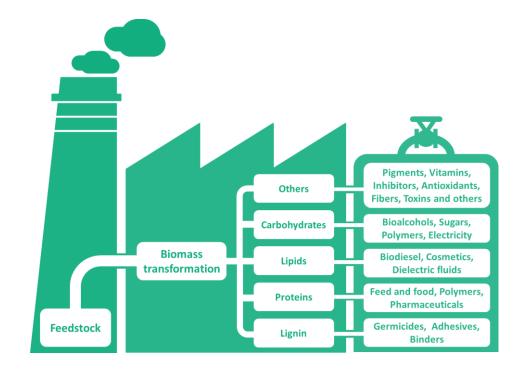
# **GREEN COMPETENCIES**

### BASIC OF BIOBASED PROCESSES AND BIOREFINERIES

Teacher(s): Paola Branduardi; Credits: 1 (8 h lectures)

Target audience: PhD students with not specific knowledge or skills in biotechnology principles, but that are interested in understanding how biobased processes can leverage the change of paradigm needed to match sustainability goals.

Notes: The course style will be process-oriented and interactive. Theoretical inputs will be followed by exercises, partner work, role-plays, case studies and group-work, when appropriate.



Adapted from:

# GREEN COMPETENCIES



# ADVANCED HUMAN ECOLOGY: THE CONCEPT OF SUSTAINABILITY THROUGH THE LENS OF HISTORICAL SCIENCES

Teacher(s): Emilio Padoa-Schioppa; Credits: 1 (8 h lectures)

- Human ecology
- Earth systems and History: Natural History / Environmental History / Ecological History / Human history Homo sapiens
- The Anthropocene epoch
- A continent into the Anthropocene: ecological history of Europe
- The Past to guide our Future: How historical sciences can help shape a sustainable future
- Discussion with students, hands-on reading of manuscripts and reports; term papers (or group presentations depending on class size)

**Target students:** PhD students with not specific knowledge or skills in sustainability or historical sciences, who are interested in understanding how an historical approach can be useful to understand the Anthropocene epoch.

# **RRI - RESPONSIBLE RESEARCH & INNOVATION**

A RRI training path addressing all doctoral students of the UNIMIB courses, from the 1st to the 3rd year, to support them during all phases of their research, to align their work with societal needs.



A day of training, with a macro-disciplinary focus and specific process dimensions, to learn about key RRI issues such as ethics, integrity, reproducibility, FAIR data, also taking into account the research projects of the phd students involved.

The RRI activities are integrated by some in-depth seminars such as the ethical aspects connected, for example, to:

- artificial intelligence
- public engagement
- science communication
- conscious and transparent use of data

# GENDER EQUALITY AND COUNTERING DISCRIMINATION IN UNIVERSITIES

**Self-paced MOOC** 

A Massive Open Online Course on Gender Equality, free to access, at @Federica.eu, the University Centre for Innovation, Experimentation and Dissemination of Multimedia Education at the University of Naples Federico II, contextualized in UNIMIB in collaboration with the inter-departmental ABCD Center on Gender Studies.

It is possible to take the course autonomously or in a group, following the **P2PU methodology** 

Referents: Prof. Andrea Mangiatordi (MOOC) and Prof. Gabriella Seveso (Scientific Director of inter-departmental ABCD Center on Gender Studies)

# GENDER EQUALITY AND COUNTERING DISCRIMINATION IN UNIVERSITIES

The course is made up of 7 lectures.

The theme of gender equality and inclusion is first addressed in its general aspects and then contextualized in the university context through the description of the phenomena that create gender inequality, the indicators through which this inequality can be measured and the possible actions and tools through which equality and inclusion can be promoted in the academic context.

The last two lectures of the course provide food for thought on the issue of gender equality beyond the binary perspective (man/woman).

# PRACTICAL INFORMATION: HOW MANY COURSES? HOW TO ATTEND?

### How many courses?

- Each course provides I or 2 credits
- You have to take a minimum of 3 credits of interdisciplinary courses (in addition to the credits of disciplinary courses to be taken according to your PhD program)
- There is no limitation. You have to achieve the 3 Credits within the PhD (technically at any time, but we recommend during the first two years)

### Is attending a course enough to obtain the credits?

- No, there is a formal assessment (pass or fail/we don't have scores)
- Assessment: during the course, in the form of exercise, or in a separate form

### Is attendance mandatory to obtain the credits?

- Yes, a student must attend a minimum of 70% of the classes
- Training based on active learning: if you have no exam, you should attend 100% of the classes

## What is the official language of the interdisciplinary courses?

All courses are taught in English: English is the official language of our PhD School

# IS ENROLLMENT NECESSARY TO ATTEND A COURSE? YES! BE AWARE OF THE TIME WINDOWS!

- The size of the class is limited: seats assigned on a first enrolled first served basis. Enrollment through S3: <a href="https://s3w.si.unimib.it">https://s3w.si.unimib.it</a>
- Interdisciplinary Courses are open to all PhD students, upon registration
- When you read the syllabus, you find the number of places available.
- You have to use the S3 system:
  - you should register by entering the Segreterie On-line and choosing "Elective courses", only during the registration periods specified for each course.
  - The registration will be closed on the achievement of the maximum number of participants specified in syllabus.
- No additional registration on the e-learning platform is needed

Courses are provided in presence

Moodle offers the material; S3 provide you the opportunity to enroll https://elearning.unimib.it/course/index.php?categoryid=12141

# **HOW TO CHOOSE?**



Not too many, not too few



Be aware of this opportunity: interdisciplinary is a chance, but also a challenge!

Interact with your tutor/supervisor/coordinator/other students

Do networking!

Good faith in interdisciplinary perspective!

Check regularly the PhD School's website

# FOR INFORMATION

Do not hesitate to ask for help or advice For information - PhD School Administration: dottorati@unimib.it

President of the PhD School: Prof. Paola Branduardi

PhD School didactic committee:

Prof. Luisa Zecca, Prof. Marco G. Malusà, Prof. Giampiero Mazzaglia

# **QUESTIONS?**





