Alta Scuola Politecnica

XVIII cycle - Winter School 2023

March 13th - 17th | Loano (SV)

Syllabus

THE INTANGIBLE MATTER OF PLACES: IMPACT AND INNOVATION COMMONS

Richard Nelsons' icastic sentence "If we can land a man on the moon, why can't we solve the problems of the ghetto?" is often used to compare our ability to manage and solve very complex technological challenges with our disheartening impotence when dealing with social challenges, such as inclusion and inequalities, due to their intrinsic nature of wicked problems. But what if, instead of comparing our ability to deal with these classes of problems, we tangle them up? One obvious outcome would be an inextricable bundle of even more unsolvable problems. The unlikely alternative one is the appearance of new dazzling solutions.

Wicked problems are the playground of ASP students. Their challenge is coupling technological opportunities and social problems to create a tech-intensive innovation district that is intrinsically conceived to produce desirable social outcomes, inclusion, and equal opportunities. Within such a vision, new institutional arrangements between public and private actors are needed to pursue actionable conventions that can trigger economically viable and investment-intensive solutions to social and environmental problems. Achieving such a vision is, however, a contentious endeavour and can present public and private actors with challenges and trade- offs. It is exactly the management of such trade-off through common goods and infrastructures the heart of the learning experience that students will be offered in this winter school.

Students will be asked to design commons, shared intangible infrastructures that are set to deliver social and environmental impacts through innovation. Impact and innovation commons are public-private partnership schemes, impact finance and investing instruments, innovation governance schemes, impact-oriented models of entrepreneurship and, ultimately, their institutional arrangements. Students will learn how to:

- navigate stakeholders' expectations and pursue actionable conventions between public and private actors that promote economic objectives through sustainable innovation and impact for society and the environment;
- select and tailor impact finance instruments, public-private schemes, governance arrangements and entrepreneurial models to realise such conventions and pursue multiple objectives;
- embed impact in institutional arrangements through ex ante impact measurement infrastructures that are jointly designed and implemented by both public and private actors;
- manage impact embeddedness through informed, measure-driven impact management tools that are responsive to and/or generative of innovation entrepreneurship and transformations.

The case of MIND Milano (https://www.mindmilano.it/) will serve as empirical background to inspire ASP students to design their commons. MIND Milano is an ambitious project conceived to transform the former Expo 2015 area of Milan into a high impact innovation district.

Coordinator	
Mario Calderini	Politecnico di Milano, School of Management

Invited lecturers and speakers	
Marcello Aprile	Politecnico di Milano, Dep. of Dept. of Energy
Giuseppe Banfi	Ospedale Galeazzi
Enrico Bellazzecca	Politecnico di Milano, School of Management
Irene Bengo	Politecnico di Milano, School of Management
Andrea Beretta	Cariplo Factory & SkyDeck Europe
Giacomo Cavalli	Cariplo Factory & SkyDeck Europe
Jacopo Famiglietti	Politecnico di Milano, Dept. Of Energy
Josip Kotlar	Politecnico di Milano, School of Management
Stefanie Kneer	Atypical
Ilaria Libani	Università degli Studi di Milano
Edoardo Nardella	Arexpo
Marica Nobile	Human Technopole
Leone Pattofatto	Equiter S.p.A.
Chiara Pennasi	Fondazione Triulza
Sabrina Boifava	UniCredit S.p.A.
Matteo Robiglio	Politecnico di Torino, Dept. of Architecture and Design
Andrea Ruckstuhl	Lendlease
Maurizio Sobrero	University of Bologna
Veronica Vecchi	SDA Bocconi School of Management

Tutors	
Danny Casprini	Politecnico di Milano, Dept of Architecture and Urban Studies / School of Management danny.casprini@polimi.it

Filippo Cavaliere   Politecnico di Milano, School of Management
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Chiara Cremasco   Politecnico di Milano, School of Management
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Giulia Datola   Politecnico di Milano, Dept of Architecture and Urban
                           Studies
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Ambra Giuliano   Politecnico di Milano, School of Management
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Zeynep Hazal Kopal   Politecnico di Milano, School of Management
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Ludovica Piergiovanni   Politecnico di Milano, School of Management
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Giulia Rossi   Politecnico di Milano, School of Management
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Valentina Tosi   Politecnico di Milano, School of Management
                           valentina.tosi@polimi.it

Giorgia Trasciani   Politecnico di Milano, School of Management
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Tommaso Tropeano   Politecnico di Milano, School of Management
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Course structure and teaching

All students will share main theoretical/plenary sessions (Monday to Wednesday). Monday afternoon will be dedicated to welcoming ASP students and introducing them to the main concepts of the school and MIND Milano. Furthermore, students will start to familiarise with the concept of purpose as an enabler for innovation and strategic decision-making. Tuesday and Wednesday will be dedicated to exploring, from different perspectives, MIND Milano ecosystem, the bridge between physical and intangible masterplans, different forms of impact and innovation commons – impact finance, public-private partnership and impact innovation – and ways to manage and

measure their impacts. Between Wednesday afternoon and Friday morning, ASP students will engage with practical sessions. On Thursday, ASP students will work in 21 parallel groups with the constant support of tutors providing them with practical tools to perform their tasks as follows. The 21 groups will represent different MIND actors and will be tasked to define an impact strategy for each assigned actor. The aim will be to provide each actor with impact objectives and strategies that are propaedeutic to the creation of bundles of impact and innovation commons that support MIND with achieving its vision. Thursday will conclude with a stakeholder fair, where all groups will have the possibility to present the output of the work done during the day and to hear from others in order to gather information for the Friday's negotiation activity. On Friday, students will move from a configuration of 21 groups to one made of 4 groups in total, corresponding to 4 negotiation tables. Each actor will negotiate their intents and build relationships with other MIND stakeholders in each negotiation table, in order to come up with a possible scenario describing an ecosystem like MIND. The final output will be made of 4 different scenarios reflecting 4 possible ecosystems within MIND. The School will conclude with a summary of learning intended to provide a general overview of themes, concepts and topics covered over the week.

Programme

Monday, March 13th

14:30 – 15:00
Alessandra Oppio and Mario Calderini
Welcome to the School

15:00 – 16:45
Josip Kotlar
Purpose and strategy

17:00 – 18:00
Mario Calderini & Polimi Tutors
School Activities and Week Format

18:00
Meeting the Alumni

Tuesday, March 14th	**09:15 – 09:15** Introduction to morning agenda and speakers
	09:15 – 11:00 Mario Calderini Impact and innovation commons
	Break
	11:15 – 13:00 Matteo Robiglio Connecting physical and intangible masterplans
	Lunch
	14:00 – 14:15 Introduction to afternoon agenda and speakers
	14:15 – 16:00 Stefanie Kneer An insight into impact investing
	Break
	16:15 – 18:00 Andrea Ruckstuhl Tech-intensive Innovation Districts: MIND Milano and the role of Lendlease
	18:00 – 19:00 MIND Stakeholders Exploring perspectives on MIND Milano (multi-stakeholder panel)
Wednesday, March 15th	**09:15 – 09:15** Introduction to morning agenda and speakers
	09:15 – 11:00 Maurizio Sobrero Impact Entrepreneurship and Innovation
	Break
	11:30 – 13:30 TCO International Peer consultation activity
	Lunch

14:30 – 14:45
Introduction to afternoon agenda and speakers

14:45 – 15:15
PoliMi tutors
Activities and tools for groupwork and negotiation

15:15 – 16:00
Veronica Vecchi
Impact public-private partnerships

Break

16:00 – 18:00
Irene Bengo, Marcello Aprile, Jacopo Famiglietti & Enrico Bellazzecca
Impact Measurement and Management

18:15 – 19:00
Get to Know your Tutor / Kick off Parallel Group Projects

Thursday, March 16th

09:15 – 13:00
Polimi Tutors
Parallel Group Projects

Lunch

14:15 – 18:00
Polimi Tutors
Parallel Group Projects

18:00 – 19:00
Stakeholders' Fair

9:00 -16:00
Multidisciplinary projects

Friday, March 17th

09:00 - 11:45
Polimi Tutors
Negotiation sessions

Break

12:00 - 13:00
Panel
Plenary session: negotiation results and School takeaways

Parallel Group Projects (PoliMi Tutors)

Thursday, March, 16th

21 groups overall representing different MIND actors will be tasked to define an impact strategy for each assigned actor. Each group will provide start-ups, corporations, public and private actors, no-for-profit organisations and impact investors operating in MIND with impact objectives and strategies that are propaedeutic to creating impact and innovation commons that can support MIND to achieve its vision, while contributing to generate positive outcome for the actor represented and its stakeholders. The tutors will support their assigned teams in the conduction of work and in giving information about the represented actors. At the end of the working day, each team will present the output of the groupwork to their peers during a stakeholder fair. All groups will have 1 hour to gather information from the others

Parallel Group Projects (PoliMi Tutors)

Friday, March 17th

Students will move from a configuration of 21 groups to one made of 4 groups in total, corresponding to 4 negotiation tables. Each negotiation table will host at least 1 representative from each actor. Each actor will negotiate their intents in their respective Negotiation Table and will build relationships with other MIND stakeholders to come up with a possible scenario describing an ecosystem like MIND. The final output will thus be made of 4 different scenarios reflecting 4 possible ecosystems within MIND.

Informal discussion: multidisciplinary projects

Thursday, March, 16th

09:00	AMSHI	14:15	S2CITIES
09:15	AppDCO2	14:30	SB4
09:30	AQUA	14:45	Sunglasshut.com OPCJ
09:45	BIMChain for Site 4.0	15:00	SURFING
10:00	Data-Driven Customer Value systems	15:15	TT4CubeSat-ATB
10:15	eHome Solutions	15:30	Wavision

10:45   GAP2
11:00   GreenWEC
11:15   MetaMAPP II - Reloaded
11:30   MILDS
11:45   MIRE
12:00   NebulOS
12:15   NEXT GENERATION HOSPITAL
12:30   OASIS
12:45   ORACLE

Course format

What   Winter School 2023
Where   Loano
When   March 2023, 13-17

Papers | students' group work

Task

Each ASP Team Project will be tasked with writing a group-based paper related to the topic of the school.

Paper title

Joining an impact-driven ecosystem like MIND Milano: opportunities and challenges

Paper structure

Students are required to use supporting evidence and examples to critically appraise opportunities and challenges arising from creating and managing impact and innovation commons in the context of an ecosystem like MIND. Students are encouraged to inform their papers by using both theory (e.g., lectures and readings list) and practice (e.g., examples from the testimonials from the school; the experience gained during the school by working in groups; business cases), while grounding the assignment on the actors of MIND embodied during the School.

Structure suggested:

- Introduction: this section is conceived to provide the topic of the essay and give some relevant, yet concise, background information regarding students' simulation of MIND stakeholders. Ideally, the introduction could be structured

into two main parts. The first part includes general statements aimed at introducing the topics and give the reader the appropriate background information needed to navigate the essay; the second part should be a thesis statement aimed at showing the structure and the contents of the essay. This part is not conceived to spoiler in detail the full contents of the essay, however it should list the main ideas of the argument and may indicate the method of organisation of the essay. This part should count for around 10% of the overall word count.

- Main Body: in this section students are expected to fully develop their argument. By leveraging on the experience of the Winter School, students should examine the opportunities and challenges that an impact-driven ecosystem like MIND Milano presents to the actors represented during the school. The different types of impact and innovation commons analysed, namely impact entrepreneurship, private and public impact investing and partnerships should be used to guide your argument by reflecting on the impact generation potential that the relationships between these commons imply for the MIND ecosystem. This section should explore the opportunities and challenges that arise when such commons interact to form a tech-intensive innovation district that is designed to achieve desirable outcomes, such as inclusion and equal opportunities. The use of appropriate evidence and examples is not only encouraged but critical for the purposes of the essay. Theoretical references from lectures and the reading list should back students' arguments, while practical examples seized throughout the Winter School should root their views in real-world scenarios. This part should count for around 80% of the overall word count. Given the length of this section, students are expected to break the section down into appropriate paragraphs in order to guide the narrative flow.

- Conclusions: this section should serve as way to draw fruitful conclusions from the reasoning in the previous section. Although necessary to summarise and condense the main points addressed in the essay, this section should NOT be a reiteration of what has been previously stated. Instead, it should be a good opportunity to weave together all the threads of the essay in a succinct and convincing way, and also potentially show what new questions or possibilities, if any, it has opened up. This part should count for around 10% of the overall word count.

Word count: 10,000 (±10%) excluding references

| Instructions | You are asked to write a group-based essay that discusses opportunities and challenges when such commons interact with each other to create a tech-intensive innovation district that is intrinsically conceived to produce desirable outcomes. You should use evidence/examples to illustrate your points and, more importantly, the MIND ecosystem actor embodied during the ASP Winter School. |

A comprehensive list of all references/sources cited must be attached to your paper. You should use the Harvard referencing system. Guidelines for following the Harvard system are provided in the following section of this table. The Essay must be word processed using a formal, modern font (such as Arial, Cambria or Calibri) size 12 and 1.5 line spaced. Text should be fully justified across the page. The use of headings to organise your work is encouraged. Pages should be numbered. Please also ensure that you have fully edited the final version before submission including spell checking, grammar checking and page numbering. Good presentation of your submission is expected and will be part of the assessment.

The word count stipulated should be adhered to. If you write under the word count by 10% or more then you should consider whether you have provided sufficient material to address all the assessment criteria. Similarly, if you go over the word count by 10% or more you should consider whether you are writing concisely and focusing on the topic. The instructors will only read up to the stipulated word count. The word count should be from the first word of the introduction to the final word in the conclusion but should exclude reference list.

Please, provide your essay with a front cover that includes the following details:
- ASP cycle and school (i.e. ASP XVIII cycle, Winter School 2023)
- ASP Project Name (e.g. MIRE)
- List of students and their matriculation number
- Date of submission
- Word count

As the ASP submission system requires all students to submit their assignment, **all members of each ASP project groups will submit one copy of the same report that must be identical to their peers' one**. For example, all members of MIRE project will have to submit a copy of the assignment. Please title your submission in the same way using the following format:

ASP_Winter2023_ProjectName,
e.g. ASP_Winter2023_MIRE

Referencing system

Your submission for the group-based essay must have a reference list containing all the sources which you have cited. It is important to get into the habit of writing down the full reference when you make notes from a source even if you think that the reference will not be used. You should also be consistent with the style of referencing. The Harvard system is appropriate. A reference is made up of two parts: a text citation and a reference list.

1. Text citation

a) References by one author

Each time you refer in the text to a source the author's surname and the year of publication are inserted in brackets immediately afterwards. Should the author's surname occur naturally in the sentence, only the year is given in brackets. If you are quoting, i.e. using the author's own words, you should also include the page number(s).

Examples:

- A recent study (Calderini, 2023) showed that…
- Calderini (2023) states that…
- "With an average cost of 3,200 to 5,000 Euros per case this has major cost implications for the future social housing of this group of people" (Calderini 2022: 34).

If you cite two references by the same author in the same year a lower-case letter is added after the date. Example: "Calderini (2022a) discusses…" or "In a further study Calderini (2022b) outlines…"

b) Multiple authors

Where a paper is written by two authors, both names should be given as they appear on the document being cited. These should be separated by the use of the word "and" if naturally occurring within a sentence and the ampersand (&) if not. Example:

- Calderini and Bengo (2021) suggested that…
- It has been disclosed (Calderini & Bengo 2021)…

If there are three or more authors, simply quote the surname of the first one followed by "et al." which means "and others". Example:

- Calderini et al. (2022) noted that…

c) Corporate or another institutional author

If the author is an organisation or group regard that as the author, e.g., a report published by Lendlease or the Italian Government. Example: (Lendlease 2021) or (The Italian Government, 2022)

2. Reference list

The reference list is located after the end of the text of the paper but before any appendices. It is arranged alphabetically by the author's surname (or first word of title, if no author). Journals, conference papers, newspapers and any other material cited should not be separated. For ease of demonstration, each will be shown independently here.

a) One or Multiple authors

Articles from Journals

Surnames of author(s), followed by initial(s). Commas used to separate the author(s) (Year of publication) Title of article. Title of journal. Volume (may be abbreviated to vol.) (Part number), Page range. (abbreviated to p/pp.). Example:

- Calderini, M., Chiodo, V. and Michelucci, F.V. (2018), "The social impact investment race: toward an interpretative framework", European Business Review, Vol. 30(1), pp. 66-81

b) Corporate author

If the author is an organisation or group regard that as the author, e.g., a report published by Lendlease. Note that the date is given after the publisher in this instance. Example:

- Lendlease. Lendlease Europe Progress Towards Mission Zero. Lendlease Europe, 2021.

c) Newspaper (author unknown)

Title of Newspaper, (Year of publication), Title of article, Date of publication. Example:

- The Economist, (2019), How to fight rare diseases with radically open innovation, Nov 27th, 2019.

Deadline   21st April 2023

Reading list and materials for the activities

See OneDrive & DropBox platforms