

curricular educational activities											
professor	academic discipline code	topic of educational activities	PhD code	ECTS module	ECTS submodule	borrowed from	assessment	hours of lectures	year	semester	
VANNICOLA Carlo	CEAR-08/D				2						
MASTRIGLI Gabriele	CEAR-09/A				1						
PETRUCCI Enrica	CEAR-11/B	Scientific Research Methodology	DO-APDoo9	7		1 –	Eligibility	49	1 st	I	
PUTZU Maria Giovanna					1						
TRUSIANI Elio	CEAR-12/B				1						
PIERANTONI Ilenia					2						
COCCI GRIFONI Roberta	CEAR-o8/C	Regenerative urban design: green and ecological technologies from urban to building scale	DO-APDo	2	1		Eligibility	14	2 nd	II	
OTTONE M. Federica					1						
PIETRONI Lucia	CEAR-o8/D	Scientific Research Methodology for Advanced Design	DO-APD012	7	4		Eligibility	49	2 nd	II	
VINTI Carlo					3						
SARDO Nicolò	CEAR-10/A CEAR-11/A	Architects and Architectural Photography	DO-APD013	4	2			28	2 nd	II	
BONACCORSO Giuseppe					2		Eligibility				
D'ONOFRIO Rosalba	CEAR-12/B	Bridge the gap. Bringing urban and global climate research together with landscape and urban planning	DO-APD	1	1	-	Eligibility	7	2 nd	II	



40th cycle - a.y. 2024-2025

Course: Scientific Research Methodology. Methods, Case Studies, Action-Research

Prof. Carlo Vannicola.....**14** hrs. (2 ECTS)

2 ECTS hours for lectures and seminars: 14

As part of the basic program of Scientific Research Methodology, the course plans to delve into the methodological foundations on which theoretical-practical scientific research must be based, aimed at defining the set of actions and foundations on which a method of analysis is built. In this sense, the differences and overlaps between different types of research will be addressed, from the inductive and deductive to the specifics of the quantitative and empirical, the historical and documentary, the experimental and comparative, to the research by similarity or resemblance. Also highlighted will be, aspects and differences in the selection and analysis of "case studies," intended as examples of analysis of complex issues and suitable for extending experience and reinforcing or validating what is already known from previous research.

In the final phase of the course, special attention will be paid to the evolution of the cultural event as a research method, understood as a sum of practical actions capable of defining themes and personalizing specific research-actions. The examples analyzed will belong to different areas of the project, from actions, to spaces, to products.

The course is organized in a first introductory lecture of 2 hours, and subsequent 4 lectures of 3 hours.

Language: English The course will be in-presence, with a liaison for PhD candidates abroad.



40th cycle - a.y. 2024-2025

Course: Design, Writing, Publishing in Contemporary Architectural Research

Prof. Gabriele Mastrigli7 hrs. (1 ECTS)

1 ECTS hours for lectures and seminars: **7**

The course frames architectural research within the context of the act of architecture itself – an act that, however, is presented as a conscious and self-reflective practice, critically engaged in investigating its own meaning, thus distinguishable from the mere exercise of the "trade", even in its highest forms. For this reason, research in architecture is examined as an intellectual process, as a body of discourses that reveal the foundations of architecture, substantiate its practices, and illuminate its purposes.

In this context, the course offers doctoral students an insight into the complex network of relationships that connects architectural design and its modes of "writing" to the vast editorial production in the field that has accompanied the advent of the digital age. Contrary to what one might think, the years of the so-called surmodernity have been characterized by the spread among architects of a new (or in some respects renewed) "typographic intelligence", marked by a great interest in book production.

Through the analysis of some emblematic case studies, the course aims to reflect on this new condition of architecture, at a crucial historical moment concerning the relationship between ideological construction (in other words, the project) and the realization of artifacts. By examining its methods, strategies, and operational implications, some of the most significant forms of "writing" carried out by architects within their work will be highlighted. The goal is to promote a critical approach to the discipline, making it understood that in architecture there are many types of design research, but also many different ways of conducting research.

1st Lecture (4 hrs): The Architecture of Books. Design, writing, publishing in contemporary architectural research. 2nd Lecture (3 hrs): The paper project. Radical architecture and research.

References

OMA, Rem Koolhaas, Bruce Mau, *S,M,L,XL*, Monacelli Press, New York 1995 Kester Rattenbury (a cura di), *This is not architecture. Media Constructions*, Routledge, London-New York, 2002 Gabriele Mastrigli (a cura di), Superstudio, *Opere. 1966-1878*, Quodlibet, Macerata 2016

Language: English



40th cycle - a.y. 2024-2025

Course: Scientific Research Methodology. Research methods for Cultural Heritage

Prof. Enrica Petrucci	3:30 hrs. (0,5 ECTS)
Prof. Maria Giovanna Putzu	3:30 hrs. (0,5 ECTS)

1 ECTS hours for lectures and seminars: 7

1. Evolution of protection in different international and national contexts

Prof. Enrica Petrucci

The evolution of protection in different international and national contexts is a complex issue that encompasses a variety of aspects and requires specific analysis. However, it is possible to identify some general trends that have characterized this evolving process. The approaches followed by European states will be outlined, with particular attention to the Italian context; the maturation of a sensitivity toward cultural heritage in recent years has led to the development of a series of activities, including the 'identification, cataloging of assets to be subjected to vicolo, so as to ensure their preservation and transmission to future generations, including through a careful process of valorization through promotion, education and research activities.

Direct and indirect sources analysis for the knowledge of the historical-cultural heritage Prof. Maria Giovanna Putzu

Some historical research will be presented through which an attempt will be made to explain the investigative method applied for the knowledge of historic monumental buildings and stratified complexes. The entire study process will be highlighted, starting from the analysis of direct sources (bibliographic and archival research) and reaching the direct analysis of the buildings, with particular attention to construction aspects (analysis of wall stratigraphy, dimensional parameters, etc.), thanks to the interrelation of which it is possible to interpret the construction and design logics of historic architecture, with both cognitive and applicative outcomes for the purpose of proper conservation and restoration.

Language: English/Italian



40th cycle - a.y. 2024-2025

Course: Scientific Research Methodology. Case study research design and approaching scientific writing

1 ECTS hours for lectures and seminars: 7

The lecture, through contributions from experts in the field, will address two key moments of the doctoral journey: a) Case study research design, with focus on the difference between methodology and methods, the importance of a good Research Question (RQ), what makes a good RQ for case study research and some realized experience; b) Approaching scientific writing, with focus on paper structure (contents and weights) and finalization and participation in a call for papers.

REFERENCE

For Case study research design:

George, A. & Bennet, A. (2004). Case studies and theory development. Cambridge: MIT Press. Schoch, K. (2019). Case study research. In G.J. Burkholder, K.A. Cox , L.M. Crawford, J.H. Hitchcock (Eds.) Research Design and Methods: An Applied Guide for the Scholar-Practitioner. Thousand Oaks, CA: Sage.

Silva, E.A., Healey, P., Harris, N., Van den Broek, P. (2015). The Routledge handbook of planning research methods. London: Routledge.

Yin, R. (2017). Case Study Research and Applications: Design and Methods (6th ed.). Thousand Oaks, CA: Sage.

For Approaching scientific writing:

Hoogenboom BJ, Manske RC. How to write a scientific article. Int J Sports Phys Ther. 2012 Oct;7(5):512-7. PMID: 23091783; PMCID: PMC3474301.

Salvagno, M., Taccone, F.S. & Gerli, A.G. Can artificial intelligence help for scientific writing?. Crit Care 27, 75 (2023). https://doi.org/10.1186/s13054-023-04380-2

https://www.researchgate.net/publication/326347463_Writing_Scientific_Research_Articles_Strategies _and_Steps

Language: English



40th cycle - a.a. 2024-2025

Course: Scientific Research Methodology. Research methods and tools for basic and applied research Prof. Ilenia Pierantoni......14 hrs. (2 ECTS)

2 ECTS hours for lectures and seminars: 14

This course allows doctoral students to explore the connections between basic and applied research and how to leverage this relationship in their own research activity. It is designed on the one hand, to train students with the capacity to set a strong literature framework for basic and applied research and, on the other hand, to explore quanti-qualitative methods and tools for social science research. The course, through contributions from experts in the field, is therefore organized into two coordinating modules:

- Basic and Applied Research. Toward an integrated approach (Ilenia Pierantoni with Chiara Camaioni). This module will introduce the students to the methods used to review the existing literature (the Narrative Reviews and Systematic Reviews approaches) and explore, through practical experiences and the description of existing research projects and studies, how these methods can be used in applied research.
- 2. *Quanti-qualitative analysis and social science research: methodologies and tools* (Ilenia Pierantoni with Valentina Polci, Nora Annesi).

This module will introduce students to methods, techniques and tools related to quanti-qualitative analysis and social science research. These methods are commonly utilized when a study aims to explore, describe, and comprehend a specific phenomenon of a place from the viewpoints of the individuals/community under investigation. Therefore, the module will also prepare students to critically analyze, develop, conduct, and present quanti-qualitative data in the framework of applied research projects.

References

For Module 1, Basic and Applied Research. Toward an integrated approach

Adams, R. J., Smart, P., & Huff, A. S. (2017). *Shades of grey: guidelines for working with the grey literature in systematic reviews for management and organizational studies*. «International Journal of Management Reviews», 19 (4), 432-454. Fan, D., Breslin, D., Iszatt-White, M. and Callahan, J. (2022). *Advancing Literature Review Methodology through Rigour, Generativity, Scope and Transparency*. «International Journal of Management Reviews», 24 (2)

Hiebl, M. R. W. (2023). Sample Selection in Systematic Literature Reviews of Management Research. *Organizational Research Methods*, 26(2), 229-261. <u>https://doi.org/10.1177/1094428120986851</u>

Page M. J., Moher D., Bossuyt P. M., Boutron I., Hoffmann T. C., Mulrow C. D. et al. (2021). PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *BMJ* 2021; 372 doi: <u>https://doi.org/10.1136/bmj.n71</u>

For Module 2, Quanti-qualitative analysis and social science research: methodologies and tools



Allegrini G. (2019). *Sociologia pubblica e democrazia partecipativa. Una proposta di analisi critica*, Quaderni di Teoria Sociale, 1, pp. 61-85.

Corbetta P. (2014). *Metodologia e tecniche della ricerca sociale*, Il Mulino, Bologna.

Dahlgren P. (2009). *Media and political engagement: Citizens, communication and democracy*, Cambridge University Press, Cambridge.

De Cataldo A., Russo F. (2022). *Metodologia e tecniche partecipative. La ricerca sociologica nel tempo della complessità*, Pearson, London.

Faccioli F. (2013). Comunicazione, sfere pubbliche e processi di civic engagement in Comunicazione e civic engagement, Bartoletti R., Faccioli F. (a cura di), pp.174-200, Franco Angeli, Milano.

Firmstone J., S. Coleman (2015). Public engagement in local government: the voice and influence of citizens in online communicative spaces. «Information, Communication & Society», 18, 680-695.

Krick E. (2021), *Expertise and participation. Institutional designs for policy development in Europe*, Palgrave Macmillan, Basingstoke.

Roulston, K., deMarrais, K., & Lewis, J. B. (2003). *Learning to Interview in the Social Sciences*. «Qualitative Inquiry», 9 (4), 643-668. <u>https://doi.org/10.1177/1077800403252736</u>

Language: English



40th cycle - a.y. 2024-2025

Course: Regenerative Urban Design: green and ecological technologies from urban to building scale

Prof. Roberta Cocci Grifoni	7 hrs. (1 ECTS)
Prof. Federica Ottone	7 hrs. (1 ECTS)

2 ECTS hours for lectures and seminars: 14

The course aims to illustrate how cities can adopt multi-scalar strategies (from concept to design developments) to implement and make available architectural and technological solutions aimed at envisioning a radically more sustainable and potentially regenerative evolution of cities.

The experimental ground that will be illustrated concerns mainly good design practices applied to urban open spaces. Some experiences are highlighted in the recovery and renaturalization of places - such as NatureBased Solutions applied on punctual urban places (microforestation)-recycling and use of innovative materials in construction and infrastructure, and self-generating materials using organic and biocompatible raw materials. The teaching program consists of three meetings with experts from both Unicam and other universities, who will explore research topics based on the theme proposed by the course, illustrating specific research and projects.

For what concerns educational credits, the course includes a learning verification activity: the doctoral students will develop and write a paper that will be discussed together with the faculty members of the PhD committee through a concluding seminar.

References

Cocci Grifoni R., Ottone M.F. (2008), *Tecnologie Urbane*, Listlab, Trento-Barcellona.

Andreucci M.B et al. (2021), Urban Services to Ecosystems: Green Infrastructure Benefits from the Landscape to the Urban Scale, Springer.

Naboni, E. Havinga L. (2019), *Regenerative Design In Digital Practice. A Handbook for the Built Environment*, Erac Research Report.

Language: English



40th cycle - a.y. 2024-2025

Course: Scientific Research Methodology for Advanced Design

Prof. Lucia Pietroni 28 hrs.	(4 ECTS)
Prof. Carlo Vinti 21 hrs.	(3 ECTS)

7 ECTS hours: **49**

The course aims to offer PhD students an in-depth study of the methodologies of scientific research in Design Studies, with a particular focus on digital resources useful for research and on Advanced Design processes and tools as a methodology of design research for innovation.

The main objective is to make people understand that Advanced Design research, aimed at solving complex problems and building innovation processes, adopts methods and tools also from other disciplines, adapting them to its own research domains and is characterised by a strongly interdisciplinary approach. The course is aimed at acquiring both the methodologies and research tools for Advanced Design and the ability to set up and develop an Advanced Design research project, to assess its implications, feasibility, results and impacts.

During the cycle of meetings and lectures in which the course will be divided, different methodological approaches, tools and practices of scientific research for Advanced Design will be presented, highlighting their specificities, state of the art and perspectives. In particular, the course intends to provide a theoretical-methodological reference framework and examples of Advanced Design research in order to understand and develop an interdisciplinary approach to research aimed at innovation.

The teaching programme is divided into two coordinated sub-modules, for which Prof. Lucia Pietroni and Prof. Carlo Vinti are responsible respectively.

The course also includes a series of meetings with external guests and researchers who will offer contributions and examples of Advanced Design projects and research activities.

The lectures held by the lecturers in charge will be opportunities to deepen and systematise the theoretical-methodological framework of design research for innovation, to define promising lines of research for innovation in the scientific-disciplinary field of design and to provide an introduction to the use of tools such as bibliographic databases, digitised sources, archives and on-line collections in the field of design.

The course includes a learning verification activity. PhD students will be guided to develop together a research project in response to a competitive call. The results of this activity will be the subject of a seminar in which the PhD students will be asked to present the research proposal they have developed.

References

Bertola P., Manzini E., *Design multiverso. Appunti di fenomenologia del design*, POLI.design, Milano 2004. Verganti R., *Design-Driven Innovation. Cambiare le regole della competizione innovando radicalmente il significato dei prodotti e dei servizi*, Etas, Milano 2009.

Burdick A., Drucker J., Lunenfeld P., Presner T., Schnapp J., *Umanistica_digitale*, Mondadori 2014 (Digital_Humanities. MIT Press, 2012).

Celi E. (ed.), Advanced Design Cultures. Long-Term Perspective and Continuous Innovation, Springer, 2015.



40th cycle - a.y. 2024-2025

Course: Architects and Architectural Photography

Prof. Giuseppe Bonaccorso **14** hrs. (2 ECTS) Prof. Nicolò Sardo **14** hrs. (2 ECTS)

> 4 ECTS Hours of lectures and seminars: 28

As part of the educational activities for the PhD in Architecture, Design, Planning of the School of Advanced Studies (SAS), this course is dedicated to the theme of the relationship between the architect and photography. The programme is made up of two distinct but overlapping cores: the first proposes an in-depth study of the techniques of photographing architecture and the urban landscape (lectures held by Nicolò Sardo), the second focuses on the relationship that architects have had and have with photography, in a function of analysis and study also linked to the profession (lectures held by Giuseppe Bonaccorso).

Within this framework, two overlapping but distinct research criteria were chosen: on the one hand, the technical, aesthetic, urban and human analysis of some of the Italian and foreign masters of architectural photography (from Paolo Monti to Gabriele Basilico, from Julius Shulman to Iwan Baan) [lectures by N. Sardo]; on the other hand, the relationship that militant architects (or critics) have had with photography as a means of investigating their historical or professional research (from Le Corbusier to Erich Mendelsohn, from Konrad Wachsmann to Andreas Feininger, from Giuseppe Pagano to Paolo Portoghesi, from Bruno Zevi to Roberto Pane) [lectures G. Bonaccorso].

The course will be developed through lectures, seminar activities and the realisation of an integrated project on the communication of architecture through photography.

Main topics discussed

The principles of visual communication of architecture. Architecture, photography, and film. History, themes and developments in architectural photography. Photography and historical criticism. Architects and travel photography. The tools for architectural photography. Shooting techniques. The photographic tool for understanding architectural space. The construction of the image. Image processing and treatment. From the digital image to the print. Technical, aesthetic analysis of some of the protagonists of architectural photography.

REFERENCE BIBLIOGRAPHY

BASILICO Gabriele, *Architetture, città, visioni. Riflessioni sulla fotografia*, Bruno Mondadori, Milano 2007. BASILICO Gabriele, *Abitare la metropoli*, Contrasto, Roma 2014.

FANELLI Giovanni, Storia della fotografia di architettura, Laterza, Roma-Bari 2009.

HAUSBERG, Axel; SIMONS, Anton, Architectural photography. Construction and design manual, Dom Publishers, Berlin 2012.

SCHULZ, Adrian, Architectural Photography: Composition, Capture, and Digital Image Processing, Rocky Nook, Santa Barbara CA 2015. Ed. it., Fotografia architettonica. L'attrezzatura, lo scatto, la post-produzione, Apogeo, Milano 2022.



40th cycle - a.a. 2024-2025

Course: Bridge the gap. Bringing urban and global climate research together with landscape and urban planning

Prof. Rosalba D'Onofrio7 hrs. (1 ECTS)

1 ECTS hours for lectures and seminars: 7

Climate friendly urban planning plays a key role in climate change mitigation and adaptation and allows for sustainable development of living conditions for future generations. Although awareness on climate adaptation is on the rise, new approaches for urban development are still in development. Based on research experiences, an integrated approach is proposed that combines urban climatology, landscape and urban planning.

References

Benton-Short, L., Keeley, M. & Rowland, J. (2019). Green infrastructure, green space, and sustainable urbanism: geography's important role, *Urban Geography*, 40:3, 330-351. doi:10.1080/02723638.2017.1360105

De La Pierre, S. (2020). Quale comunità per quale territorio. Scienze del territorio, n. 8/2020 "La democrazia dei luoghi. Azioni e forme di autogoverno comunitario". pp. 12-19. DOI: 10.13128/sdt-11109.

EEA, (2020), Urban adaptation in Europe: how cities and towns respond to climate change, Report EEA No 12/2020.

Elinbaum, P., and Galland, D. (2016). Analysing Contemporary Metropolitan Spatial Plans in Europe Through Their Institutional Context, Instrumental Content and Planning Process, *European Planning Studies*, 24(1):181-206. DOI: 10.1080/09654313.2015.1036843

Grădinaru, S.R & Hersperger, A.M. (2018). Green infrastructure in strategic spatial plans: Evidence from European urban regions, *Urban Forestry & Urban Greening* 40C, 2019

Monteiro, R., Ferreira, J.C. and Antunes, P. (2022). Green Infrastructure Planning Principles: Identification of Priorities Using Analytic Hierarchy Process. Sustainability, 2022, 14(9), 5170. doi:10.3390/su14095170 Slätmo, E., Nilsson, K. and Turunen, E. (2019). Implementing Green Infrastructure in Spatial Planning in Europe, *Land* 8(62). doi:10.3390/land8040062

Language: English