IMT SCHOOL FOR ADVANCED STUDIES LUCCA

PhD Program in "Cognitive and Cultural Systems"
Track in "Analysis and Management of Cultural Heritage"
(AMCH)

Course List - A.Y. 2020/21

IMT SCHOOL FOR ADVANCED STUDIES LUCCA

AMCH PhD students are required to take all the following <u>COMPULSORY COURSES</u>

Course	Lecturer(s)	Hours
Advanced Seminars: Analysis and Management of Cultural Heritage (no exam)	Maria Luisa Catoni	30
Advanced Topics in Archaeology I	Riccardo Olivito	10
Advanced Topics in Archaeology II	Alessandro Poggio	10
Advanced Topics in Cultural Heritage Law	Andrea Magliari	20
Advanced Topics in Islamic Cultural Heritage	Silvia Di Vincenzo	10
Contextual Analysis and Individual Objects: Arts, Sciences, Techniques, Beliefs	Linda Bertelli	30
Cultural Heritage and Law	Andrea Averardi	40
Culture and Arts: Economic Analysis and Public Policy	Stefano Baia Curioni	25
Data Analysis and Management for Cultural Heritage (no exam)	Raffaele Perego Salvatore Orlando	20
Decision-Making in Economics & Management	Massimo Riccaboni	10
East and West, Present and Past: The Cultural and Political Interplays between the Arabic World and Europe	Amos Bertolacci	60
Geospatial approaches to cultural heritage (no exam)	Philip Verhagen	25
History of Ancient Art and Archaeology	Maria Luisa Catoni	40
History of Contemporary Art (no exam)	Michele Dantini	15
History of Early Modern and Modern Art	Carl B. Strehlke	30
Management of Complex Systems: Approaches to Problem Solving	Andrea Zocchi Simone Gerola	40
Models of Organization of Cultural Institutions	Paola Dubini	30
Museology and History of Collecting	Emanuele Pellegrini	60
Project Management	Beatrice Manzoni	35
Temporary Organizing and Event Management in Cultural and Creative Industries	Yesim Tonga Uriarte	10

The following <u>ELECTIVE COURSES</u> are also available for AMCH PhD students:

Course	Lecturer(s)	Hours
Advanced Methods for Complex Systems I	Diego Garlaschelli	20
Advanced Methods for Complex Systems II	Diego Garlaschelli	20
Advanced Methods for Complex Systems III	Tiziano Squartini	20
Advanced Topics in Network Theory: Brain Networks	Guido Caldarelli	10
Advanced Topics in Network Theory: Dynamical Models in Network Theory	Guido Caldarelli	10
Basic Elements of Cybersecurity	Rocco De Nicola	10
Business Model for Emerging Markets	Nicola Lattanzi	20
Clinical Psychopathology and Psychiatry	Pietro Pietrini	16
Critical Thinking (no exam)	Gustavo Cevolani	16
Firms, Business Analytics and Managerial Behavior	Nicola Lattanzi	20
Forensic and Legal Psycology	Pietro Pietrini	16
Funding and Management of Research and Intellectual Property (no exam)	Marco Paggi	10
Introduction to Cognitive and Social Neuroscience	Pietro Pietrini	12
Introduction to Cognitive and Social Neuroscience	Emiliano Ricciardi	12
Introduction to Network Theory	Guido Caldarelli	10
Introduction to Neuro-Linguistics	Alessandra Rampinini	12
Neurobiology of Emotion and Behavior	Pietro Pietrini	12
Neuroscience of Perception and Experience-Dependent Plasticity	Emiliano Ricciardi	22
Neuroscience of Perception and Experience-Dependent Plasticity	Davide Bottari	24
Philosophical and Ethical Themes in Neuroscience (no exam)	Mirko Daniel Garasic	10
Philosophy and Neuroscience in Moral Reasoning	Gustavo Cevolani	12
Philosophy of Science (no exam)	Gustavo Cevolani	20
Scientific Writing, Dissemination and Evaluation (no exam)	TBD	8
Strategies and Business Behavior	Nicola Lattanzi	20

Compulsory Courses

Advanced Seminars: Analysis and Management of Cultural Heritage
Maria Luisa Catoni
30 Hours

Course description will be available soon.

Advanced Topics in Archaeology I
Riccardo Olivito
20 Hours

Learning Outcomes:
The aim of this course is to illustrate the different approaches that archaeologists have been using in dealing with space and place, their use, definitions, perceptions.

Abstract:
How does space becomes a place? What are the architectural, functional, and perceptual mechanisms that allow humans to move from natural landscapes to anthropic landscapes?
The world is becoming increasingly urbanised, with increasingly denser and more complex cities. Not to mention the theme of networks and virtual spaces and places. It is not surprising, then, that at present one of the most innovative fields of study aims at analysing the way space, especially the urban one, is created, transformed, and modified, in accordance with the needs of the people living within it.
In the field of archaeology as well these issues have recently become one of the main topics.
Thus, the aim of this course is to illustrate the different approaches that archaeologists have been using in dealing with space and place.
After a theoretical introduction, the first part of the course will investigate how public and private spaces were/are architecturally and planimetrically arranged, and then used and lived.
In the second part, attention will be drawn to both ancient and modern perceptions of space/place. With the help of selected case studies, the course will investigate how actors and viewers not only arranged and used those spaces but also perceived and reproduced them through images. At the same time, the course will focus on modern tools and approaches aiming at reconstructing/retrieving the (ancient) experience of being in the world.

Lecture Contents:
Shaping and Living the Space; Public spaces in the Ancient world and beyond; Between public and private sphere: the Roman house; Movement and Space in the ancient World.

Teaching Method:
Lectures and in-class discussions

Bibliography:
Bibliography will be indicated at the beginning of each lesson.

Final Exam:
Oral and written presentation

Prerequisites:
None

Advanced Topics in Archaeology II
Alessandro Poggio
10 Hours

Learning Outcomes:
The course aims at offering critical skills to read ancient visual evidence in a cross-cultural perspective. Moreover, the course will make participants familiar with a wide set of methodologies in the field of archaeology, history of ancient art and cultural heritage.

Abstract:
Ancient artefacts have complex lives, which unfold from their production down to our times: looking at the many stages of an object's life provides a better understanding of its production context, circulation, reuses, post-antique receptions and interpretations. In other words, the study of ancient artefacts allows us to follow a colourful thread connecting different cultures across space and time.

The course intends to explore selected case studies related to the Ancient Near East and Greco-Roman Mediterranean, which provide a complex picture of artistic and cultural interactions through traditional and cutting edge methodologies. The starting point will be the material and visual aspects raised by the objects themselves, and a constant dialogue with contemporary theoretical frameworks will allow analysis not only of the original contexts of these artefacts, but also of their role in the present-day debate.

Off-site lectures may also be organised.

Lecture Contents:
After an introduction to the course, lectures will focus on selected case studies related to the Ancient Near East and Greco-Roman Mediterranean. The analysis of this evidence will take into account both traditional and cutting edge methodologies in order to shed light on pivotal episodes of connection between different cultures across space and time.

Teaching Method:
Lectures – In-class discussions – Assignments – Field trips

Bibliography:
Bibliography will be provided by the lecturer. Students interested in specific issues are invited to request bibliographical references.

Final Exam:
Seminar

Prerequisites:
None

Advanced Topics in Cultural Heritage Law
Andrea Magliari
20 Hours

Learning Outcomes:
Students will acquire a critical understanding of the European dimension of Cultural Heritage law, including both EU Law and the European Convention on Human Rights law.

Abstract:
The aim of the course is to provide students with a critical understanding of the European dimension of Cultural Heritage Law through the analysis of the case law of the European Court of Justice and of the European Court of Human Rights dealing, in particular, with the free circulation of goods and services, the right to property and the freedom of artistic expression.

Lecture Contents:
- Basic notions of EU Law and of the European Convention on Human rights
- The impact of EU law on Cultural Heritage: the fundamental freedoms
- The case law of the European Court of Justice (ECJ) regarding the free circulation of cultural goods and cultural services
- The impact of the European Convention on Human Rights on cultural rights
- The case law of the European Court of Human Rights on the right to property and on the freedom of expression

Teaching Method:
Classes are based on lectures and on students' presentations followed by group discussion. The Course will adopt a case study approach.

Bibliography:
Course materials and other suggested readings will be provided during the lessons

Final Exam:
The final evaluation takes into account students' presentations and active participation during the course.

Prerequisites:
Attendance of Cultural Heritage and Law.

Advanced Topics in Islamic Cultural Heritage
Silvia Di Vincenzo
10 Hours

Learning Outcomes:
Expected learning outcomes of the course are:
- Familiarization with the mechanisms of knowledge transmission from antiquity to the contemporaneity, with a special focus on handwritten traditions;
- The acquisition of a global vision of the spread of science and philosophy from the Middle Ages until the 20th century, from the Western to the Eastern borders of the Islamicate world;
- The acquisition of basic acquaintance with the manuscript as an object and with its components;
- The identification of ancient, medieval, and modern manuscripts as an important part of the cultural heritage in need of being studied and preserved.
- Awareness of the legal aspects of the trade and preservation of manuscripts.
- Awareness of the dynamics of the illegal trade of manuscripts.

Abstract:
Human beings have been spreading knowledge both in oral and written form since the earliest times. Before printing became the prevailing channel of written transmission, and in some areas of the world even afterwards, the production of handwritten documents largely dominated the history of culture. This course aims to introduce students to the study of Islamic cultural heritage, offering them a method of analysis of ancient, medieval and modern handwritten documents, i .e. manuscripts. A manuscript is an item whose textual, figurative, and material components provide a considerable amount of information useful to the reconstruction of intellectual and social history, and a specimen of cultural heritage worth reflection, analysis, and preservation. The manuscript tradition of Avicenna's (d. 1037) philosophical masterpiece, the Book of the Cure, transmitted in hundreds of codices along almost nine centuries all over the Islamicate world, will be taken as case-study.

Lecture Contents:
- Knowledge transmission East and West: History and mechanisms.
- Written transmission East and West: The different impacts of Gutenberg's invention of the printing press; the interactions and mutual influences of Eastern and Western traditions.
- Handwritten texts in the Islamicate world from Andalusia to India: The peculiarities of this manuscript culture.
- What are the manuscripts? What are their relevant parts? What is the use of studying them? Methodologies for the analysis of manuscripts as sources of information.
- Where are manuscripts preserved and how do they circulate nowadays? The manuscript as part of our cultural heritage in need of preservation strategies.

Teaching Method:
Each lesson will alternate moments of direct instruction (supported by audio-visual equipment and PowerPoint presentations) and moments devoted to stimulating students' questions and discussions. Each student will also benefit from personalized learning, being guided and supported in the choice of a research

subject related to the course that might be of his own interest and that will be the object of the final presentation.

Bibliography:

Bibliography:

Bertolacci, A., and Dadkhah, G. The Metaphysics of the Shifāʾ: Facsimile Edition of MS Malek Library (Tehran) 1085. Bibliotheca Iranica: Iranshahr Scientific and Philosophical Writings, no. 5. Costa Mesa, CA: Mazda Publishers, Inc, 2018.

Brodie, N., 'Consensual relations? Academic involvement in the illegal trade in ancient manuscripts', in P. Green and S. Mackenzie (eds), Criminology and Archaeology: Studies in Looted Antiquities (Oñati International Series in Law and Society), Oxford: Hart, 2009, pp. 41-58

Gacek, A. Arabic Manuscripts: A Vademecum for Readers. Leiden-Boston: Brill, 2009.

———. The Arabic Manuscript Tradition: A Glossary of Technical Terms and Bibliography - Supplement. Leiden: Brill, 2012.

Geoffrey, R. (ed.) Historical Aspects of Printing and Publishing in Languages of the Middle East: Papers From the Third Symposium on the History of Printing and Publishing in the Languages and Countries of the Middle East, University of Leipzig, September 2008. Leiden-Boston: Brill, 2014.

Gruber, Chr. J. The Islamic Manuscript Tradition: Ten Centuries of Book Arts in Indiana University Collections. Book Collections on Project MUSE. Bloomington: Indiana University Press, 2010.

Manacorda S., Chappell D. (eds.), Crime in the art and antiquities world: Illegal trafficking in cultural property, Springer, 2011.

Ulph, J., Smith, I. (eds.), The illicit trade in art and antiquities: International Recovery and Criminal and Civil Liability, Oxford: Hart, 2015.

Websites and links:
1. ERC Project: "PhiBor: Philosophy on the Border of Civilizations - Towards a Critical Edition of the Metaphysics of Avicenna", directed by Prof. A. Bertolacci:
http://project.avicennaproject.eu/
https://phibor.sns.it/
2. Culture under threat:
https://theantiquitiescoalition.org/understanding-the-problem/interactive-maps/
3. Printing History in the Arabic Speaking World:
http://exhibits.library.yale.edu/exhibits/show/arabicprinting/printing_history_arabic_world
4. A list of the main digitized collections of Arabic and Islamic manuscripts
https://aub.edu.lb.libguides.com/c.php?g=276485&p=1842810

Final Exam:

Presentation and discussion of a selected paper/essay related to the subject matter of the course.

Prerequisites:

None

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Contextual Analysis and Individual Objects: Arts, Sciences, Techniques, Beliefs
Linda Bertelli
30 Hours

Learning Outcomes:

By the end of this course, Ph.D. Students will be able to:
- describe and interpret the main contents and methodologies in visual culture studies and visual studies of science;
- perform close readings of key texts in visual culture studies and media theory of the 20th Century;
- analyze critically key essays regarding the topics covered in class (presentation);
- understand and evaluate the main features of scientific photography (case studies from the end of the 19th Century).

By the end of the assessment, Ph.D. Students will be able to:
- Critically evaluate a specific topic at the juncture of the topics discussed in class and their own research projects;
- Produce an original paper

Abstract:

The course will be divided into two, closely interrelated parts. The first part will be dedicated to a clarification of contents and methodologies of the research field visual studies of sciences, mostly conducted through a genealogical approach. Mentioning and analyzing a vast array of texts and authors, the course will offer an in-depth study of visual culture studies, Bildwissenschaft and theories of media from the 20s and 30s (L. Moholy-Nagy and W. Benjamin in particular).

In order to put the methodological framework outlined in the first part to work, the second part of the course will be dedicated to specific case studies, starting from the photographic work of the French physiologist Etienne-Jules Marey (1830-1904).

The understanding of the course material will be assessed through a (1) mid-term examination given in class through the course and (2) a final paper. The paper will be based on material from any topic discussed in class, in engagement with Students' research projects. The aim is to publish the best papers, and/or use your essay in order to prepare a joint publication together with me and/or your classmates.

A more detailed course description with additional information (required readings, grading scale, class policies, etc.) will be sent to all the Students at least 2 weeks before the beginning of the course.

Lecture Contents:

(I) Course Presentation. Introduction and Key Concepts: visual studies of science and visual cultures studies (1st part).

(II) Introduction and Key Concepts: visual cultures studies (2nd part).

Methodological conclusion and brief description of the impacts of visual studies of science.

(III) Midterm Presentation#1: Key texts on visual cultures studies.

(IV) Media theories and the cultural meanings of images: Laszlo Moholy-Nagy, Walter Benjamin and Siegfried Kracauer (1st part).

(V) Media theories and the cultural meanings of images: Laszlo Moholy-Nagy, Walter Benjamin and

Siegfried Kracauer (2nd part).

(VI) Midterm Presentation#2: Key texts on media theory.

(VII) Analysis of the first case study.

(VIII) Analysis of the second case study.

(IX) Midterm Presentation#3: Key texts on case studies.

(X) Conclusions and general discussion about the final paper.

Teaching Method:

The course combines various teaching approaches, both student-centered and teacher-centered methods, such as:

(1) Inquiry-based learning.

(2) Direct Instruction.

(3) Eventual off-site lectures

Bibliography:

- Albera, F., and M. Tortajada (eds.), Cinema Beyond Film: Media Epistemology in the Modern Era. Amsterdam: Amsterdam University Press, 2010.
- Benjamin, W. One-way street and other writings. London: Penguin, 2009.
- Benjamin, W., The Work of Art in the Age of Its Technological Reproducibility and Other Writings on Media, Harvard University Press, 2008, pp. 158-165.
- Braun, M., Picturing Time. The Work of Etienne-Jules Marey (1830-1904). Chicago: University of Chicago Press, 1992.
- Bredekamp, H., "A Neglected Tradition? Art History as Bildwissenschaft", Critical Inquiry, 29, 3, 2003: 418-428
  - Charney, L., and V. R. Schwartz. Cinema and the Invention of Modern Life. Berkeley, Calif: University of California Press, 1995.
- Crary, J., Techniques of the Observer. On Vision and Modernity in the Nineteenth Century. Cambridge [Massachusetts]: MIT Press, 1990.
- Daston, L., and P. Galison, Objectivity, Zone Books, 2007, pp. 115-190.
- Didi-Huberman, G., Images in spite of all: four photographs from Auschwitz. Chicago: University of Chicago Press, 2008.
- Gordon, R.B., Why the French Love Jerry Lewis: From Cabaret to Early Cinema. Stanford, Calif: Stanford University Press, 2001.
- Edwards, E., Anthropology and photography 1860-1920. New Haven: Yale University Press, 1992.
- Elkins, J., "Art History and Images that are not art", The Art Bulletin, 77, 4, 1995: 553-571.
- Ginzburg, C., "Minutiae, Close-up, Microanalysis", Critical Inquiry, 34, 1: 174-189.
- Hansen, M., Cinema and Experience. Siegfried Kracauer, Walter Benjamin, and Theodor W. Adorno. Berkeley, Calif: University of California Press, 2011.
- Jones, Caroline A., and Peter Galison. Picturing Science, Producing Art. New York: Routledge, 1998.
- Mitchell, W.J.T., Picture Theory. Essays on Verbal and Visual Representation, Chicago/London: The University of Chicago Press, pp. 1-34 (Introduction and Chapter I).
- Mitchell, W.J.T., What do pictures want? The lives and loves of images, Chicago/London: The University of Chicago Press, pp. 28-56.

- Moholy-Nagy, L., Painting Photography Film. Cambridge, Mass: MIT Press, 1987.
- Pauwels, L., Visual cultures of science: Rethinking representational practices in knowledge building and science communication. Hanover, New Hampshire: Dartmouth College Press, 2006.
- Rabinbach, A., The Human Motor: Energy, Fatigue, and the Origins of Modernity. New York: BasicBooks, 1990.
- Valihao, P., Mapping the Moving Image: Gesture, Thought and Cinema Circa 1900. Amsterdam: Amsterdam Univ. Press, 2009.
- Véray, L., Les images d'archives face à l'histoire: de la conservation à la création. Futuroscope: Scéren, 2011.

Final Exam:

In order to delve deeper into critical issues at the juncture of the topics discussed in class and students' research projects, each student will be responsible for submitting one essay assignment on a topic of her/his choice which must be established in agreement with me. Each student can decide on the topic of the final paper at any point during the course. Essays should be 8-10 pages in length.

Deadline for the submission will be scheduled during the course.

Prerequisites:

None

Cultural Heritage and Law
Andrea Averardi
40 Hours

Learning Outcomes:
By the end of the course students will be able to identify the most relevant legal features of cultural heritage and they will acquire the ability to analyze, in a critical manner, the interplay of public and private interests underlying cultural heritage.

Abstract:
The course will examine the main elements of International Law, EU law and Domestic Law on Cultural Heritage. More in detail, during the course students will be provided with: the definition of Cultural Heritage; the fundamental legal principles and the main public interests underlying Cultural Heritage (protection, circulation, access). Moreover, the course will also focus on: the European Landscape Convention and Domestic Law on Landscape; the fundamental principles and main issues underlying Landscape Law (definition of landscape; levels of governance; public law instruments).

Lecture Contents:
Cultural Heritage; Administrative Law; European Administrative Law, Global Administrative Law; International Law; Public Law; Comparative Law.

Teaching Method:
Integrated Method: Frontal Lectures and Case Law Teaching.

Bibliography:
Course readings and materials will be provided at the beginning of the course

Final Exam:
Individual discussions/presentations will be arranged. Evaluations will also take into account student's participation during the classes.

Prerequisites:
None

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Culture and Arts: Economic Analysis and Public Policy
Stefano Baia Curioni
25 Hours

Learning Outcomes:
The aim of the course is to provide a theoretical and evidence based introduction on some of the main issues and controversies that characterize the contemporary arts and cultural production scene at national and international level.

Abstract:
During the XX century arts and culture have undergone a process of deep transformation which has placed them inside the capitalistic mode of exchange. In particular, since the 60s, artistic and cultural production has drawn the attention of economists and policy makers who tried to define borders and rules of these industries and the extend to which economic theory could apply to such systems. The research that will be presented will try to interrogate this scene as a community of practices, in which actions, thoughts, behaviors, social rules constantly share a representational and symbolic dimension, and cultural statements. Even when it appears to be just gaming pure financial interests.

This interrogation lasted for more than ten years now, with different focuses: on the practices of galleries and museum, on the collector practices, on art prices, on the problematic issue raised by the idea of "aura" in the contemporary cultural environment.

The evidences piled up as the result of a multiplicity of methodologies and research practices, within and outside the academic environment: statistical analysis: qualitative analysis, historical analysis, dialogues with artists, galleries and curators, and also through the experience of a direct involvement in curatorial, managerial, and institutional tasks.

Lecture Contents:
The course will articulate two main sessions:
- Practices and Challenges of the contemporary art system
- In this session the lectures will address the issue of understand art as a "practice", the artworks as "agents" and the so called art system as a mediation/ relational system. The session will provide:
- The basic theoretical frameworks, based on the works of Pierre Bourdieu, Bruno Latour, Arthur Danto, George Dickie and Howard Becker;
- An historical overview of the evolution of the "contemporary" art system from its late XIX century premises;
- An empirical and critical assessment of the recent evolution of the contemporary art system and market
- Cultural policies, cultural institutions and art cities

This session will concentrate on the issue of cultural, arts, heritage policies, and their relationship with the overall process of modernization and development. The session will be dedicated in particular at the issue of understanding the process of transformation of a museum and cultural institution in the context of the development of an art city. The case of Mantua and Palazzo Te will be the central argument of the session. This session will take place in Mantua.

Teaching Method:
Lecture, on site visits, participation to projects

Bibliography:
a. Sociology - Foundational studies on the art system and markets
Becker H. (1988) Arts Worlds, Berkeley UP
Moulin R. (1992) L'Artiste et le marché, Flammarion, Paris
Bourdieu P. (1996) The Rules of Art. Genesis and Structure of the Literary Field, Stanford University Press
Luhmann N. (2000) Art as a Social System, Stanford University Press, (originally published in German in 1995, Frankfurt: Suhrkamp Verlag). Chapter 4: 'The Function of Art and the Differentiation of the Art System', pp 133-184.
Karpik L. (2010) Valuing the Unique. The Economics of Singularities, Princeton University Press, Princeton and Oxford, 2010
b. History
Lippard L. R. (1973) Six Years; the Dematerialization of the Art Object from 1966 to 1972, University of California Press, Berkeley, Los Angeles
Hobbs S.D. (1997) The end of the American Avant Garde, New York University Press, New York
Alberro A. (2003) Conceptual Art and the Politics of Publicity, Massachusetts Institute of Technology
De Marchi N. & Van Miegroet H.J. (2006) "The History of Art Markets" - in Victor A. Ginsburgh and David Throsby (eds): in Handbook of the economics of art and culture, Amsterdam: Elsevier/North Holland, 2006 - pp. 69-116
Richard S. (2009) Unconcealed: The International Network of Conceptual Artists 1967-1977, Ridinghouse, London
c. Philosophy
Harris R. (2010) The Great Debate About Art, Prickly Paradigm Press, Chicago
Danto A. C. (1964) The Artworld, Journal of Philosophy, 61, pp. 571-584
Danto A. C. (1997), After the End of Art. Contemporary Art and the Pale of History, Princeton University Press, Princeton
Dickie G. (1974), Art and the Aesthetics. An Institutional Analysis, Cornell University press, Ithaca
Dickie G. (2000) «The Institutional Theory of Art» in Noel Carrol (ed.) Theories of Art Today
d. Economics /management
Goodwin C. (2006) Art and Cuture in the History of Economic Thought, in D. Thorsby and V. Ginsburgh (eds): Handbook of the economics of art and culture, Amsterdam: Elsevier/North Holland, 2006, pp 3-24
Ginsburgh V, Mei J. and Moses M, The computation of Prices indices - in D. Thorsby and V. Ginsburgh (eds): Handbook of the economics of art and culture, Amsterdam: Elsevier/North Holland, 2006, pp 947-974
Wilde C. The intrinsic value of a Work of Art: Masaccio and the Chapmans in M. Hutter and D. Throsby (eds) Beyond Price - Value in Culture, Economics, and the Arts, pp. 220 -236
Adler M. (1985) Stardom and talent, American Economic Review, 75, 208-212
Rosen S. (1981) The economics of superstar, American Economic Review, 71, pp.845-848
e. Contemporary studies on art system, art markets, art value

General and Globalization

Velthuis O. (2005) Talking prices, Princeton Un. Press

Quemin A. (2006) Globalization and mixing in the visual arts: An empirical survey of 'high culture' and globalization. International Sociology, 21 (4), pp. 522- 550

Groys B. (2008) Art Power, MIT, Boston

Graw I. (2009) High prices. Art between the market and the celebrity culture, Sternberg, Berlin

Horowitz N. (2011) Art of the Deal, Princeton University, Princeton

Mc Andrew C. (2012) The International Art Market in 2011. Observations on the Art Trade over 25 years. The European Fine Art Foundation, Tefaf, Helvoirt

Lind M., Velthuis O. (2012) Contemporary art and its commercial market. A report on current condition and future scenario. Sternberg, Berlin

Velthuis O., Baia Curioni S (2015), Global Canvases, Oxford University Press

Public Art

Sharp J., V. Pollock and Paddison, R. (2005) Just art for a just city: Public art and social inclusion in urban regeneration, Urban Studies, 42(5), pp. 1001-1023

Pollock, V. and R. Paddison (2010) Embedding Public Art: Practice, Policy and Problems, Journal of Urban Design, 15 (3), pp. 335 – 356

f. Critical and Curatorial studies

Burn I. (1975), The Art Market: Affluence and Degradation, Artforum, April 1975, pp. 34-37 (also in Charles Harrison & Paul Wood, Art in Theory, Blackwell 1992, pp. 908-909)

AAVV (2007) Curating Subjects, Open Editions, London

Altshuler B. (2009), From Salon to Biennial, Phaidon, London

Sholette G. (2011) Dark Matter: Art and Politics in the Age of Enterprise Culture, Pluto Press, New York

g. Actors

Ashenfelter O. and Graddy K. (2006) "Art Auctions" in V. A. Ginsburgh and D. Thorsby (eds), Handbook of the economics of art and culture, Amsterdam: Elsevier/North Holland, 2006 pp 909-942

Lindemann A. (2011) Collecting Contemporary Art, Taschen, Munich (Several editions)

Cohen Solal A. (2010) Leo and His Circle: The Life of Leo Castelli, Alfred Knopf, New York

Saatchi C. (2009) My Name is Charles Saatchi and I Am an Artoholic, Phaidon, London

Bowness A. (1989) The Conditions of Success, How the Modern Artist Rises a Fame, Thames&Hudson, Wisbech, Balding and Mansell Ldt

Baia Curioni S. (2012) A fairy tale. The art system globalization and the fairs movement, in M. Lind and O. Velthuis (eds) Contemporary art an its commercial markets, Sternberg Press, Berlin

Adams G. (2012), Fair or foul: more art fairs and bigger brand galleries, but is the model sustainable?, The Art Newspaper, London, 20 June 2012

Baia Curioni (2014), Which fair, which art: exchange rituals and impossible markets, in Garutti F, (ed.)Fairland, Explorations, insights, and outlooks in the future of Art Fairs, Mousse Publishing, Milan, 2014.

Final Exam:
Personal dissertations agreed with the lecturer

Prerequisites:
None

Data Analysis and Management for Cultural Heritage
Raffaele Perego, Salvatore Orlando
20 Hours

Course description will be available soon.

Decision-Making in Economics & Management
Massimo Riccaboni
10 Hours

Learning Outcomes:
The main goals of the course are: (1) to take marketing theories and methodologies out into the world, applying them to interesting questions of individual behavior and societal outcomes; (2) to develop a basic understanding of human psychology and social dynamics as they apply to marketing contexts; (3) to become familiar with the major theory and research methods for analyzing consumer behavior; (4) to develop market analytics insight into consumer actions.

Abstract:
This class is structured into two parts: 1) general knowledge relating to basic conceptual notions of marketing and consumer behavior; and 2) heritage marketing. Most of time will be devoted to close reading of textbook and research papers, including discussion of the relative merits of particular methodologies. Students will participate actively in class discussion, engage with cutting-edge research, evaluate empirical data, and write an analytical paper. The course aims at enabling students to develop and enhance their own skills and research interests.

Lecture Contents:
1. Course overview, consumer behavior; Chapters 1-4, Principles of Marketing
2. Marketing to create value, theory and practice; Chapters 5-9, Principles of Marketing
3. The Marketing Plan; Chapters 14-16, Principles of Marketing
4. Heritage marketing
5. Behavioral economics insights, guidelines for final paper

Teaching Method:
Lecturing

Bibliography:
The main textbook for this course is entitled "Principles of Marketing" and is freely available online https://open.lib.umn.edu/principlesmarketing/.

See also: Kotler (2019), Principles of Marketing, Peason (17th Edition), available at the library and Misiura (2006), Heritage Marketing, Elsevier.

Additional readings will be provided by the instructor based on students' research interests (see Google Drive)

Final Exam:
50% Participation. Attendance is required and will be recorded. The teaching format is interactive, i.e. active discussion is expected between students and instructor and will be part of the student evaluation.

Abstract concepts will be understood through real life examples and observations. 50% Final Paper. You will select a topic related to marketing and consumer decision making and write a paper.

Prerequisites:
None

East and West, Present and Past: The Cultural and Political Interplays between the Arabic World and Europe
Amos Bertolacci
45 Hours

Learning Outcomes:

The intent is to defend a historical period, like the so-called Middle Ages, affected by negative prejudices, and to vindicate its importance in order to get inspiration and orientation for contemporary concerns and issues.

Abstract:

On closer inspection, the Middle Ages turn out to be a lively, bright, and instructive historical period, contrary to how they are frequently presented. At the time, the fiercest religious confrontation between Europe and Islam ever seen in history, and ambivalent political dynamics inspired by Realpolitik, coexisted with a very intense cultural interaction: in a religious situation of mutual accusations, and in a political scenario made of both clashes and negotiations, European culture regained acquaintance with his Greek past through the mediation of the Arabic-Muslim "other". In this way, a primeval cultural "globalization" took shape, the first European system of education was built, and a strong rationalistic continuum – from Aristotle, through the Arabic philosophers, until the main universities in Europe – created a non-dogmatic and trans-national "illuminism" ante litteram. If cultural "bridges", side by side with religious "walls" and political "shaky grounds", existed at that time, analogous forms of dialogue and positive interaction can for sure be explored also nowadays.

Lecture Contents:

The course will consist of three main sections, historical, aesthetic, and political, respectively. 1) Historical Analysis: A "terra franca" of philosophical culture spread in the Abrahamitic monotheisms (Christianity, Islam, Judaism) around the Mediterranean Sea in the Middle Ages, gathering in a trans-national scientific community intellectuals belonging to each of these three religions (on the footsteps of Aristotle: al-Kindi, Avicenna, Averroes, Moses Maimonides, Albert the Great, Thomas Aquinas, Dante Alighieri), whose works underwent, or benefited from, the Greek-into-Arabic and the Arabic-into-Latin translations. This process shaped a well-defined paradigm of intercultural synergy in the Middle Ages for the first time in history: Greek philosophy, shared through translations, provided a common rational basis to distinct cultures, each one of which affirmed its own language, religion, and political status, but was nonetheless able to interact with the others at a high cultural level, despite religious and political antagonisms, thanks to the universalizing force of the shared philosophical tradition. The peak of Medieval rationalism was reached in Arabic-Islamic philosophy, which pursued the goal of a totally rational – and, by the same token, moderate and tolerant – version of the Muslim religion, in replacement of the more literalist and radical interpretation by theologians.
2) Aesthetic Reflexes: This paradigm was mirrored in Medieval and Renaissance art and iconography. On the one hand, the Arabic script, often deprived of any conceptual meaning, detached from religious connotations, and taken simply as an image (the so-called "pseudo-Koufic" or "pseudo-Arabic"), appears frequently as a decorative element in Western art (paintings, sculptures, buildings) through channels to be precisely assessed. This can be taken as a sign of the bridging force of Arabic culture. On the other hand, when the relationship affects the religious level, the confrontation of different creeds – Christian and Muslim, respectively, in the case at stake – emerges in all clarity in iconographic motifs like the "triumph of Thomas Aquinas over Averroes".
3) Political Perspective: The Medieval pattern of intercultural synergy holds significant actuality and can be variously applied to the contemporary scenario: it affects the role of education in multi-ethnic communities; the emergence of new international and a-confessional issues and concerns; and the re-assessment of the

"de-radicalizing" role of philosophy in contemporary culture. Discussion of stereotypes such as the "clash of civilizations" and the "wars of religion", and of the debate on the "cultural roots of Europe".

Teaching Method:
Frontal lessons with discussion

Bibliography:
F. Starr, Lost Englightenment. Central Asia's Golden Age from the Arab Conquest to Tamerlane, Princeton University Press, Princeton 2013.
Further bibliography will be communicated in class.

Final Exam:
Oral presentation of a topic related to the course content

Prerequisites:
None

Geospatial Approaches to Cultural Heritage
Philip Verhagen
25 Hours

Learning Outcomes:
Upon completing this course, students will have obtained a broad, comprehensive overview of geospatial approaches to cultural heritage. They will be able to do the basics of setting up, analysing and presenting geospatial datasets, and to reflect on the impact of geospatial approaches on heritage research and management.

Abstract:
Geospatial data provide essential information on numerous aspects of cultural heritage and landscape. They are increasingly available at all levels of detail, and can be combined with other sources of information to generate new, spatial knowledge about the past and its relationship to the present.

In this course, you will be confronted with a broad range of geospatial approaches applied to cultural heritage. Starting from the technical and theoretical concepts, you will be introduced to specific data management and spatial analysis techniques that have proved to be useful for analyzing, interpreting and visualizing cultural heritage data. Lectures will be alternated with practical exercises, where you will get hands-on experience in working with geodatabases, GIS, remote sensing and statistics. Finally, you will be asked to reflect on the applicability within your own work: in what way can your research profit from these approaches?

Lecture Contents:
The course will be taught in 8 lessons of 3 hours plus one extra session to discuss the outcomes.
Each 3 hr block will start with a lecture introducing the general concepts and providing one or more illustrations from cultural heritage projects. The second half of the block will consist of practical exercises.

The following topics will be addressed:
1. Theory of databases and database standards
2. Database analysis and reporting
3. GIS I (geodata and mapping)
4. GIS II (spatial analysis)
5. GIS III (spatial statistics)
6. Remote sensing
7. Terrain models
8. Advanced visualisation (storymapping, 3D visualisation)

In the final session, you will be asked to present a reflection on how geospatial approaches can be implemented in your own line of research.

Teaching Method:
Plenary lectures and practicals.

Bibliography:
Individual articles and other resources will be provided in advance of the course.

Final Exam:
The course will be evaluated through the practical assignments and the final presentation.

Prerequisites:
No previous knowledge of GIS is required. For the practicals, you will need a personal laptop, preferably running the Windows operating systems. You will also need a working version of MSAccess (included in Microsoft Office 365). Installation instructions for other software resources will be provided before the start of the course.

History of Ancient Art and Archaeology
Maria Luisa Catoni
40 Hours

Learning Outcomes:
The course aims at providing students with:
1. methodological tools to perform visual analyses
2. critical tools to perform contextual analyses of visual productions.
3. basic knowledge of a number of ancient classical monuments, contexts and/or productions
4. methodological and critical tools to analyse the "Classical Tradition", visual in particular, focussing on contemporary and modern uses of Classical Antiquity and in particular to analyse:
   - the interplay between contemporary contexts and ancient Greek and Roman objects, images, texts, data, contexts, ideals, notions, stories;
   - the historical approach to image and art perception;
   - the notions of media, techniques and mediality;
   - the role of specific spaces and contexts of fruition in defining the status of an object, the status of Art, the notion of Artist, etc.;
   - the role of specific cultural traditions in defining the status of an object, the status of Art, the notion of Artist, etc.;
   - the interplay between present and past in archaeology, archaeological sites, monuments and museums.

The use of different analytical tools is learned inferentially through case studies, discussions of papers and analyses of visual and textual documents performed i n class by the students. The course includes off-site lectures at close contact with the objects, sites, cultural institution.

Abstract:
The course is shaped according to the characteristics, backgrounds and needs of the class. It consists of four main threads strictly and dynamically intertwining:

1. The nature and types of questions asked about Classical Antiquity (approached and analysed mainly through the case studies of Impressionism, Cubism, Video art, Design, Advertisement)

2. The applicability of those questions to the Ancient World (through the cases of the Ara Pacis, the Parthenon and Ancient Portraiture)

3. Contemporary and modern uses, manipulations, mediation and fruition of ancient monuments, arts, ideals; the role of museums.

4. Modern and contemporary scientific practices related to Antiquity.

Lecture Contents:
The content of the individual lectures will be adapted to the needs of the class. The course consists of four main blocks of lectures

1. The questions asked (through the cases of Impressionism, Cubism, Video Art, Design, Advertisement: visual, textual, contextual analysis)

2. The Ancient World: the status of objects, the notion of techne and medium, history of perception and

musealization of ancient art: visual, textual, contextual analysis;

    2.1 The Ara Pacis: past and present (the Augustan Era, the XVIth century, the fascist excavation, the present museum and uses); visual, textual, contextual analysis; style and iconography in the ancient political propaganda;

    2.2 The Parthenon: ancient uses and modern debates; visual, textual, contextual analysis;

    2.3 Ancient portraiture: ancient status and modern misunderstandings;visual, textual, contextual analysis

3. Contemporary and modern uses, manipulations, mediation and fruition of ancient monuments, sites, objects, images, arts, ideals; the role of museums; scientific practices related to Antiquity;

4. Conclusions

Teaching Method:

The course requires an active participation of the students in performing both case or paper discussions, visual analyses, argument analysis as well as preparing site visits.

Bibliography:

Bibliography will be provided by the lecturer.

Final Exam:

The evaluation is based on the actual participation in the class training activities (paper discussions, visual analyses, case analyses as well as on seminars held by each student on a subject chosen with the lecturer. The scope of the seminar is to verify the actual acquisition of the capacities and tools to perform visual, textual and contextual analysis.

Prerequisites:

None

School for Advanced Studies Lucca

**History of Contemporary Art -
Art History and Political History. Fascist Italy as a Case Study
Michele Dantini
15 Hours**

Learning Outcomes:
The antithesis fascism/anti-fascism will prove inadequate to describe the multiplicity of Italian artistic addresses between the two wars - this is the main thesis of the course; and unexpected continuities between the first and second half of the century will emerge on pre-political or anthropological-cultural levels rather than on merely stylistic ones.

Abstract:
The course is aimed at students of various backgrounds and does not require particular historical-artistic skills. It is proposed to consider the Italian art of the period between the two wars - "second" Futurism, Strapaese, Novecento, etc. - in its relationship with the politics of image promoted by the fascist regime and the different "ideas of nation" debated at public level.

Lecture Contents:
We will try to recognize and delineate the specificity of the Italian nationalism between the two wars, selected in its difference from the French and German nationalism of the same period, in the light of historical events of primary importance, such as the post-war period, the D'Annunzio occupation of Fiume, the squads, the March on Rome and finally the political history of the Twenties and Thirties.

Continuous references to literature and politics will be proposed, through essays, official speeches and newspaper or magazine articles, in an attempt to connect as accurately as possible the figurative conversation promoted by this or that artist to current ideologies; and to reconstruct the relationships between art history and political history on the one hand; history of art and ecclesiastical and religious history on the other.

Teaching Method:
Frontal lessons

Bibliography:
Michele Dantini, Art and politics in Italy between fascism and the Republic, Donzelli, Rome 2018
Laura Malvano, Fascism and politics of the image, Bollati Boringhieri, Turin 1988
Gioacchino Volpe, Italy on the move, Donzelli, Rome 2010 (1928)
Emilio Gentile, Fascismo di pietra, Laterza, Roma 2007

Final Exam:
No Exam

Prerequisites:
None

School for Advanced Studies Lucca

History of Early Modern and Modern Art
Carl B. Strehlke
30 Hours

Learning Outcomes:
Sensibility to issues facing art museums especially in 2019–2020

Abstract:
My course will concentrate on a wide range of issues that confront museum curators and museum administrators largely in Europe and North America: connoisseurship of objects, conservation, image copyright, installation, didactics, and the art market. The course will include trips to Florence and the TEFAF art fair in Maastricht, Netherlands.

Lecture Contents:
1) Cataloguing a picture, a Lucchese example in the Philadelphia Museum of Art including on-site visits to two churches in Lucca. 2) Writing museum labels for the internet and for the gallery 3) Rapport between collector, museum and market: trip to Maastricht 4) Copywriting a work of art: a matter of taste 5) Visit to internet cataloguers of Florentine museums 6) MeToo and Diversity and the Museum world. Please note class contents change depending on issues that come up in the museum world in the news. These themes will be discussed over the course of several sessions.

Teaching Method:
Short presentations followed by discussion.

Bibliography:
No bibliography. Students should read articles in newspapers about the art world, museums, and market and in particular the New York Times, Guardian, Wall Street Journal, and Financial Times.

Final Exam:
The final class students will be asked to give a presentation of about 10 to 15 minutes on a specific topic having to do with the class contents. The specific subjects will be decided during the first two meetings.

Prerequisites:
None

Introduction to Islamic Culture: Language, Religion, Challenges
Amos Bertolacci
15 Hours

Learning Outcomes:

The aim of the course is to grant students a basic familiarity with the fundamental elements of Arabic-Islamic civilization, taking the language (Arabic), on the one hand, and the religion (Islam), on the other, as pivotal axes of a survey of the development of Islamic culture, with a final analysis of the challenges that the dogmatic, historico-geographical, and socio-political specificities of Islam pose to contemporary concerns.

Abstract:

A bedouin and peripheral semitic language like pre-Islamic Arabic became, with the rise of Islam, not only the holy language of God's revelation in the Qur'an, but also an instrument of cultural communication soon shared by Muslims, Christians, and Jews, both within and outside the Muslim empire. The first part of the course will be devoted to providing some hints at the basic features of Arabic as a language, its way of writing, alphabet, pronunciation, and linguistic profile. The second part will focus on the historical setting of the emergence of Islam as a religion, its dogmatic development, and its rapid fragmentation into a series of distinct Islamic confessions. From a contemporary point of view, the course will end with a brief consideration of the compatibility of Islam with Christianity and Judaism in so far as it purports to be the last revelation of the God of Abraham, a "territorial" religion, and a system of thought in which the boundaries between religion and politics remain fluid.

Lecture Contents:

1) Language: Arabic, its main features, and the first globalization of culture
2) Religion, the founder: the prophet Muhammad
3) Religion, main principles: the Five Pillars
4) Religion, particular branches: Sunnis, Shi'is, and other religious groups
5) Challenges, religious: "There is no God but God": the last and definitive Monotheism?
6) Challenges, geographical: a religion of the earth (Mecca and Medina; Jerusalem; the "House of Islam")
7) Challenges, political: secularism and theocracy, Islam and Islamism

Teaching Method:

Frontal lessons with discussion

Bibliography:

Gerhard Endress, Islam. An Historical Introduction, Edinburgh University Press, Edinburgh 1988, 2nd edition 2002.
Further bibliography will be communicated in class.

Final Exam:

Oral presentation of a topic related to the course content

Prerequisites:

None

Management of Complex Systems: Approaches to Problem Solving
Andrea Zocchi, Simone Gerola
40 Hours

Learning Outcomes:
Structured approach to problem solving with related tools for each step

Abstract:
Problem solving of complex situations and systems requires a structured approach. This course, which is based on the training adopted by some top management consulting Firms, provides a methodology which is applicable to a broad variety of industries and issues.

Lecture Contents:
1) 7 steps problem solving approach and related tools; 2) Grocery retail case; 3) Relaunch of museum case; 4) Company X relaunch case in group exercise

Teaching Method:
Theory applied to specific business cases. In class group exercises and discussions

Bibliography:
Lecture notes and exercises handed out during each lesson

Final Exam:
Written test and oral exam

Prerequisites:
Participation to all lessons and in class exercises

Models of Organization of Cultural Institutions
Paola Dubini
30 Hours

Learning Outcomes:
To frame the issue of governance from an institutional and managerial perspective; to clarify the meaning of some widely used terms associate with governance of cultural organizations; to provide a conceptual basis to incorporate managerial logic in non managerial streams of research

Abstract:
The course will discuss different governance configuration (mechanisms and structures to guarantee continuity) through the lens of four broad dichotomies: private vs public; short vs long term; economic vs non economic value creation; local vs global

Lecture Contents:
the course is logically organized into the following modules:
1. management what? what is management all about in (cultural) organizations
2. the intrinsic fragility of cultural organizations
3. governance and long term sustainability
4. archetypes of cultural organizations: public no profit private
5. cultural organizations at play: the geographical perspective
6. performance of cultural organizations and its assessment

Teaching Method:
Face to face lectures - discussion of cases and incidents - exercises

Bibliography:
Will be provided in class

Final Exam:
Will be discussed with participants on the first day of class

Prerequisites:
I am starting from the assumption that participants will have no prior knowledge of governance issues. I suggest an introductory reading at your convenience Dubini Montanari Cirrincione Management of cultural organizations Egea 2017

Museology and History of Collecting
Emanuele Pellegrini
60 Hours

Learning Outcomes:
The course aims at providing students with an advanced knowledge on museum as a cultural, social and historical problem. Furthermore, it provides students with analytical tools to evaluate the role of museums and their mission in present society.

Abstract:
The course aims at discussing topics in museology and history of collecting. Based both on theoretical reflections on art collecting as a social phenomenon, and practical case taken from present debate on museums and museum studies, the course provides students with critical tools for the analysis of emerging themes i n early collections, private and public goods, ownership of the collection/fruition of the collection. Organization of museums i n Italy, France, UK and the USA should be considered also course key issues.
Basically the course i s structured i n two parts. The first one (30 hours) is dedicated to general issue in museology and history and collecting. Lessons try to answer to five main questions on museum and its nature: definition (what), history and present development (when), relationship between collections and territories (where), reasons for collecting (why), the relationship between public and museum staff (who). The second part (30 hours) is dedicated to case studies on key topic on collecting issues such as provenance, curatorship, museum organization. Off site lectures are included in the course.

Lecture Contents:
1: Introduction. Method matters
2: Defining a museum: past and present
3-4: A museum birth?
5-6: (off site Lucca Villa Guinigi and Palazzo Mansi);
7: Museum and its territory
8: Museum and its public
9-10: (off site, tbd);
11-Beyond borders: museums in the future
12: The role of provenance
13: Musealizing a private collection
14: Dispossession and musealization
15: Original and fake
16: New perspectives, old technologies
17: (off site tbd);
18: Final Seminar

Teaching Method:
Class and offsite lectures

Bibliography:

Bibliography will be provided in class

Final Exam:
Research seminar

Prerequisites:
None

IMT SCHOOL FOR ADVANCED STUDIES LUCCA

Project Management
Beatrice Manzoni
35 Hours

Learning Outcomes:
At the end of the course participants will be able to:
- Understand the project management process and the main phases of a project with a specific focus on the cultural heritage sector.
- Use the main project management tools (project charter, stakeholder map, WBS, responsibility matrix, Gantt chart, RBS).
- Discuss the challenges of building a project team and managing its dynamics.
- Manage project team dynamics and make creative and problem solving oriented decisions in teams.
- Develop a project plan for a research project.

Abstract:
No longer just a sub-discipline of engineering, project management is a discipline on its own. The management of projects is currently the dominant model in many organizations for strategy implementation, business transformation and new product development. Also, cultural industries are increasingly becoming project-based organizations.
Project success relies on the ability to deal with both technical and organizational issues. Project managers deal with developing a project plan integrating requirements, resources, interdependencies and timing. Nevertheless, risks are behind the corner and project success is linked with the ability to forecast and plan responses for unpredictable situations. Moreover, project managers, dealing with interdependent actors, face the issues of building the team but also of fostering teamwork and creativity and resolving conflicts.

Lecture Contents:
- The relevance of project management in cultural industries: why are projects important in cultural sectors? Why can we define cultural industries as project-based organizations?
- Getting started with some definitions: what is a project? What is the life cycle of a project? How do projects fit with processes in organizations? What is a project management plan? Who is the project manager and what are his/her responsibilities and competences? Who are the other relevant stakeholders?
- Planning, executing and monitoring a project: logics and techniques that support scope, time, cost and risk management.
- The project team: acquiring, developing and managing people within the project context.

Teaching Method:
The course is highly experiential and it combines a mix of methods: lectures, in-class exercises, case discussions, assignments.

Bibliography:
Course materials will be detailed in the schedule.
Additional readings:

- PMI, A Guide to the Project Management Body of Knowledge (PMBoK Guide).
- Project Management Toolkit for Arts and Culture Projects. ARTerial Network, 2011.
- Managing Art Projects with Societal Impact. 2016.

Final Exam:
Individual assignment that requires to write a project plan for the PhD research project.

Prerequisites:
None

IMT SCHOOL FOR ADVANCED STUDIES LUCCA

Temporary Organizing and Event Management in Cultural and Creative Industries
Yesim Tonga Uriarte
10 Hours

Learning Outcomes:
Expected learning outcomes can be outlined as follows:
1. To acquire an understanding of the role and purpose(s) of temporary organizing and events in CCIs;
2. To acquire an understanding of critical issues regarding techniques and strategies required to plan successful events;
3. To acquire an understanding of the problems and challenges of cultural organizations and potential institutionalization solutions for the future;
4. To acquire the knowledge and competencies required to assess the quality and success of events.

Abstract:
This interdisciplinary course will provide a critical understanding about temporary organizing and event management considering the specific characteristics of the arts and heritage field. The lectures examine problems and challenges of cultural organizations in the contemporary world and discuss potential institutionalization solutions for the future. The understanding of 'contemporary', 'sustainability' and 'success' regarding management, organization and programming within cultural organizations will be discussed. Particular attention will be dedicated to employee management, work dynamics and relations between cultural organizations and cities through case studies from the Cultural and Creative Industries (CCIs).

Lecture Contents:
- Principles of temporary organizing and event management: From concept to reality
Historical perspective of rituals and festive events, introduction to event management, size & type of event. Understanding temporality, stability and change, institutional theory, project management, processes and practices, the relations of events and projects with the wider context and multiple environments.

- Events, values & ethics
Code of ethics, contextualizing / conceptualizing the event, related communities, aims, expectations, priorities and value schemes, developing the concept/theme, relations with the field/sector, relations with the location/host city.

- Tourism impacts of events
Issues, problems and policy aspects impacting event tourism, business and managerial skills for professional decision making.

- Relations of events with cities and impacts on the city image

Teaching Method:
The course teaching method is built on a combination of direct Instruction and inquiry-based learning, e.g. lecturing, class participation and presentation of students' projects.

Bibliography:

- Bakker, R. M., DeFillippi, R. J., Schwab, A., & Sydow, J. (2016). Temporary organizing: Promises, processes, problems. Organization Studies, 37(12), 1703-1719.
- Bennett, A., Taylor, J., & Woodward, I. (2014). The Festivalization of Culture. Routledge.
- Engwall, M. (2003). No project is an island: Linking projects to history and context. Research Policy, 32(5), 789–808.
- Harvey, N., & Broadhurst, S. (2018). A Tale of Three Cities 2017: Art Basel, Venice Biennale, Frieze London. Body, Space & Technology, 17(1).
- Tonga Uriarte Y, DeFilippi R J, Riccaboni M, Catoni M L (2019). Projects, institutional logics and institutional work practices: The case of the Lucca Comics & Games Festival. International Journal of Project Management, 37(2), 318-330.
- Tonga Uriarte, Y., Antognozzi, T., Catoni, M. L. (2019). Investigating Tourism Impacts of Festivals: An exploratory case study of a big scale comic-con. Event Management, 23.
- Tsoukas H., Chia R. (2002). On organizational becoming: Rethinking organizational change. Organization Science, 13(5), 567–582.

Final Exam:

The evaluation process takes into account: (i) class participation including attendance in lectures and active participation in discussions during the class (40%); and (ii) presentations in the classroom, during which each student will discuss a case study (a cultural event or a cultural organization) (60%).

Prerequisites:

Being an AMCH student

Elective Courses

SCHOOL FOR ADVANCED STUDIES LUCCA

IMT

Advanced Methods for Complex Systems I
Diego Garlaschelli
20 hours

Learning Outcomes:
Students will learn how to: identify the properties of real-world complex systems that defeat traditional tools of analysis across different disciplines and research fields; design advanced methods to empirically characterise, mathematically model and computationally simulate those properties.

Abstract:
This interdisciplinary course aims at introducing rigorous tools from statistical physics, information theory and probability theory for investigating real-world complex systems arising in different fields of research. First, some key aspects of complexity encountered in physical, biological, social, economic and technological systems will be reviewed. Then, emphasis will be put on the construction of theoretical models based on the concept of constrained randomness, i.e. the maximisation of the entropy subject to suitable constraints. This will lead to the introduction of maximum-entropy models that serve as mathematical benchmarks for the properties of highly heterogeneous systems. Special cases of interest for this first part of the course include statistical ensembles of time series and correlation matrices with given properties. Applications to pattern detection in econophysics and neuroscience will be discussed. Full mathematical derivations of the models, as well as methods of statistical inference and model selection for data analysis will be provided.

Lecture Contents:
- Introduction
- From Complexity to Thermodynamics
- From Thermodynamics to Statistical Physics
- Entropy in Probability Theory
- Entropy in Information Theory
- Empirical patterns in univariate time series
- Empirical patterns in multivariate time series- Community detection for correlation matrices

Teaching Method: Combination of frontal lectures, blackboard discussions and students' presentations.

Bibliography: References to relevant research papers are gradually provided during the lectures. Lecture slides and other course materials are regularly distributed to the students.

Final Exam:
Consists of students' presentations of research papers, around which the professor organises a critical discussion with the rest of the class, towards the end of the course. No additional time slot for the exam is therefore scheduled.

Prerequisites: Solid mathematical background, scientific curiosity, logical rigor, interest in multidisciplinarity, passion for theory.

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IMT

Advanced Methods for Complex Systems II
Diego Garlaschelli
20 hours

Learning Outcomes:
Students will learn how to: identify the properties of real-world complex systems that defeat traditional tools of analysis across different disciplines and research fields; design advanced methods to empirically characterise, mathematically model and computationally simulate those properties.

Abstract:
The second part of the course "Advanced Methods for Complex Systems" focuses on advanced practical applications of the concepts introduced in the first part. In particular, emphasis will be put on the successful areas of pattern detection and network modelling. Network pattern detection is the identification of robust empirical patterns (like scale-invariance, clustering, assortativity, reciprocity, motifs, etc.) that are widespread across real-world networks and that deviate systematically from some null hypothesis formalised in terms of a suitable random graph model. The models introduced in part 1 will then be used here for pattern detection purposes. Similarly, they will be used for modelling the properties of real networks   in   terms   of   explanatory   factors.
The course will include a combination of recent and ongoing research in the NETWORKS unit at IMT Lucca, thereby offering directions for possible PhD projects in this area.

Lecture Contents:
- Complex networks: robust empirical properties
- Maximum-entropy network ensembles
- Networks with given degree sequence
- Maximum likelihood parameter estimation in network ensembles
- Pattern detection in networks
- Reciprocity and the Reciprocal Configuration Model
- The International Trade Network (econometric vs network modelling)

Teaching Method: Combination of frontal lectures, blackboard discussions and students' presentations.

Bibliography:
References to relevant research papers are gradually provided during the lectures. Lecture slides and other course materials are regularly distributed to the students.

Final Exam:
The final consists of students' presentations of research papers, around which the professor organises a critical discussion with the rest of the class, towards the end of the course. No additional time slot for the exam is therefore scheduled.

Prerequisites: Solid mathematical background, scientific curiosity, logical rigor, interest in multidisciplinarity, passion for theory. Successful completion of the course "Advanced Methods for Complex Systems I"

IMT | SCHOOL FOR ADVANCED STUDIES LUCCA

Advanced Methods for Complex Systems III
Tiziano Squartini
20 hours

Learning Outcomes:
Students will learn how to: identify the properties of real-world complex systems that defeat traditional tools of analysis across different disciplines and research fields; design advanced methods to empirically characterise, mathematically model and computationally simulate those properties.

Abstract:
The course focuses on the problem of network reconstruction from partial topological information and on the different physical and mathematical properties found when the input information is treated as a "soft" or a "hard" constraint.
On the side of applications, emphasis will be put on the reconstruction of financial and interbank networks from node-specific properties, with the purpose of improving stress tests and systemic risk estimates in real markets and offering better tools to policy makers. The methods recently found by central banks to be the best-performing reconstruction techniques will be reviewed in detail.
On the side of theory, the surprising breakdown of the equivalence of statistical ensembles constructed from soft and hard constraints will be discussed. We will show how this breakdown affects all models of complex systems encountered throughout the three parts of the course. Finally, we discuss deep implications for data compression, information theory and combinatorial enumeration.

Lecture Contents:
- From binary networks to weighted networks: the Weighted Random Graph
- The Weighted Configuration Model
- The Enhanced Configuration Model
- The Enhanced Gravity Model
- Network reconstruction in various settings
- Adaptive Networks
- Breaking of ensemble equivalence
- Relative entropy between ensembles
- Weak and strong ensemble nonequivalence
- Applications to combinatorial enumeration and data compression

Teaching Method:
Combination of frontal lectures, blackboard discussions and students' presentations.

Bibliography:
References to relevant research papers are gradually provided during the lectures. Lecture slides and other course material are regularly distributed to the students.

Final Exam:
The final consists of students' presentations of research papers, around which the professor organises a critical discussion with the rest of the class, towards the end of the course. No additional time slot for the exam is therefore scheduled.

Prerequisites:

Solid mathematical background, scientific curiosity, logical rigor, interest in multidisciplinarity, unlimited passion for theory. Successful completion of the courses "Advanced Methods for Complex Systems I" and "Advanced Methods for Complex Systems II"

Advanced Topics in Network Theory: Brain Networks
Guido Caldarelli
10 Hours

Learning Outcomes:
knowledge of the basis of Brain Networks

Abstract:
we shall provide the tools to measure and analyze the different kinds of networks that can be defined when studying the human brain (e.g. the functional and the structural one).

Lecture Contents:
Physics of Brain measurements. Networks from Functional Magnetic Resonance Imaging, applications to cohorts of patients

Teaching Method:
Powerpoint slides

Bibliography:
Scale-Free Networks G. Caldarelli

Final Exam:
the candidate will work in the classroom and we shall assign a "pass" or "retake" vote at the end of course.

Prerequisites:
None

Advanced Topics in Network Theory: Dynamical Models in Network Theory
Guido Caldarelli
10 Hours

Learning Outcomes:
Being able to use models for network theory

Abstract:
we shall review the most popular growth models for networks, the details of the most studied dynamical processes on networks and their implementation in Python. This module requires module 2.

Lecture Contents:
LECTURE 31 Models I
LECTURE 32 Models II
LECTURE 33 Models III
LECTURE 34-37 Epidemics
LECTURE 37-40 Exercises in Python

Teaching Method:
Powerpoint lectures

Bibliography:
Scale-Free Networks G. Caldarelli

Final Exam:
The candidate will work in the classroom and we shall assign a "pass" or "retake" vote at the end of course.

Prerequisites:
None

Basic Elements of Cybersecurity
Rocco De Nicola
10 Hours

Learning Outcomes:
Basic knowledge of the risks when surfing the web and of the main tools for defending assets and privacy.

Abstract:
This introductory an introductory course that would be beneficial for any student and does not assume any prior technical knowledge. We will discuss cybersecurity in general and present techniques and tools for navigating securely and for defending assets and privacy.

Lecture Contents:
Introduction to Cybersecurity, examples of different kinds of attacks. Best practice for malware detection and for password management. Secure and privacy preserving Internet surfing and application usage. Introduction to Access Control methods. Basic notions of cryptography: Symmetric and Asymmetric Encryption, Public-Key Encryption, Message Authentication, Digital Signatures. Steganography.

Teaching Method:
Blackboard; slides.

Bibliography:
Handouts with the slides, introductory books,

Final Exam:
Final collective discussion about the importance of cybersecurity with short presentations by all students.

Prerequisites:
None

Business model for emerging markets
Nicola Lattanzi
20 hours

Learning Outcomes:

Students will learn how to evaluate strategies, as well as how to locate sources of potential competitive advantage from a perspective that, for the purpose of this course, encompasses the internal and dynamic fit of a strategy. They will also learn how to identify organizational barriers and corporate behaviors that sustain or challenge the development and execution of strategies, and the competitive advantage of a company.

Abstract:

The course is based on key business concepts that will support students develop the expertise required to understand and evaluate business models in competitive and emerging markets. The course will describe the decision-making in competitive markets as well as in emerging markets at the business unit level, in which many key strategic choices and actions are formulated and undertaken. The essential "tool-kit" that combines a broad understanding of strategies, businesses and market dynamics and the new challenges of businesses in today's world.

Lecture Contents:

1. What makes the economy emerging and the market new?
2. Fintech challenge: centralized economy versus decentralized economy? Decentralized organizations and business models? DAO, DAC and others
3. Digital Economy: effects and implications on business modeling, business plan and business reporting
4. Family business and Italian SMSB: "Made in a recognizable place"
5. A business model for a global value chain approach in a Digital Economy. The smile curve: where value is added along supply chains
6. The new Silk Road - Belt and Road: Avoiding Errors, Discovering Opportunities
7. Creation of needs, emerging behaviors and business dynamics: the interaction of neuroscience and technology for business and strategy
8. Zombie Economy and Zombie Firms: The Emerging Phenomena
9. Network approach for Business modeling and decision making process
10. The role and function of studies in management science and business strategy. The emerging scenario.

Teaching Method:

Lectures, discussions, business cases, presentations.

Bibliography:

Suggested readings will be provided for each topic.

Final Exam:

Critical paper presentations in groups.

Prerequisites:

None

Clinical Psychopathology and Psychiatry
Pietro Pietrini
16 Hours

Learning Outcomes:
By attending this Course, students will learn the fundamental psychopathological and clinical aspects of the main psychiatric disorders, including affective disorders, psychosis and personality disorders. Students will learn the most recent acquisitions from genetic and cognitive neuroscience to the understanding of the etiopathogenesis and clinical course of mental disorders. Implications for mental insanity evaluation will also be discussed.

Abstract:
Mental disorders remain to-date still undiagnosed or misdiagnosed in many cases, with deleterious effects on the individual patient's life, including extreme acts that could be prevented by early and prompt diagnosis. Because most mental disorders appear during adolescence, their effects may be even more disruptive and dramatic. Furthermore, mental disorders may favor alcohol and drug abuse as well as promote abnormal behaviors that may pose serious risks for the patients and their family members. At the same time, mental disorders may affect, even severely, the ability of the patient to control their acts. This, in turn, may become relevant for assessing their responsibility in situations that fail to respect the law. Implications for the forensic and legal setting, including the role of personality disorders in imputability (see the Raso Sentence by the Italian Supreme Court in 2005) will be discussed.

Lecture Contents:
* The issue of the diagnostic process in Psychiatry. Differences as compared to the other medical branches
* Affective disorders. Mood depression. Psychopathological factors in mood depression. The neurobiology of depression
* Bipolar disorder. The psychopathological condition of mania. Lack of critical abilities in mania. Clinical course of bipolar disorders. Predicting switch from one polarity to the other
* Anxiety disorders. General anxiety, panic attacks. Obsessive-compulsive disorders
* Psychoses. Schizophrenia and schizophreniform disorders. Delusional thinking. Hallucinations
* Personality disorders. Definition and classification. The three clusters of personality disorders. Psychopathological and clinical aspects of the individual personality disorders.
* Mental disorders and implications for imputability: the assessment of insanity and implications for the forensic and legal settings

Teaching Method:
The course includes theoretical and methodological face-to-face lessons, with the help of slides and publications. E-learning platform are used to share learning materials (slides, data, publications, text chapters, etc.).

Bibliography:
Lesson slides; selected papers and text chapters discussed in class

Final Exam:

Knowledge will be verified throughout the course by student's engagement into discussion in class; a written examination with open questions and multiple choice questions will be administered at the end of the course

Prerequisites:

It is strongly suggested, though not mandatory, that students have taken the following courses prior to enrolling in this one: Introduction to Cognitive and Social Psychology; Neurobiology of Emotion and Behavior.

IMT | SCHOOL FOR ADVANCED STUDIES LUCCA

Critical Thinking
Gustavo Cevolani
20 Hours

Learning Outcomes:
The course aims at improving the students' skills in understanding, presenting and evaluating problem statements and arguments. After following the course, students will be able to rigorously distinguish between "strong" and "weak" arguments; they can formulate and analyze theses and hypotheses and evaluate the impact that evidence and information has on them; and they can better draw logical and effective conclusions from both hypotheses or evidence.

Abstract:
Constructing and evaluating arguments is fundamental in all branches of science, as well as in everyday life. The course provides the basic tools to recognize and analyze correct forms of inference and reasoning, detect the unsound or fallacious ones, and assess the strength of various kinds of argument. The toolbox includes elementary deductive logic, naïve set theory, patterns of inductive and abductive inference, and elements of statistical and probabilistic reasoning. By engaging in real-world exercises of correct and incorrect reasoning, students will familiarize with basic epistemological notions (truth vs. certainty, knowledge vs. belief, theory vs. evidence, etc.), with the analysis of relevant informal concepts (like truth, falsity, lies, misinformation, disinformation, post-truth, fake news, rumors, etc.) and with common reasoning pitfalls, heuristics and biases as investigated in cognitive psychology and behavioral economics.

Lecture Contents:
Lecture 1. Presentation, discussion and choice of specific topics. Arguments and statements.
Lecture 2. Evaluating statements: Truth, certainty, informativeness, truthlikeness, etc. Relativism and post-truth.
Lecture 3. Evaluating arguments: Deductive reasoning and valid arguments. Fallacies and invalid arguments.
Lecture 4. Evaluating arguments: Non-deductive and uncertain reasoning. Inductive and abductive reasoning.
Lecture 5. Evaluating arguments: Probabilistic reasoning and confirmation. Correlations.
Lecture 6. Reasoning and decision-making: Dual-process theories. Heuristics and biases.
Lecture 7. Reasoning and decision-making: Ecological rationality and fast-and-frugal heuristics.
Lecture 8. Recap, verification and general discussion.

Teaching Method:
Mixture of lectures and discussion seminar.

Bibliography:
We won't have a textbook or a proper reading list. Relevant readings will be shared on the IMT Google Drive. The following are useful general texts on the main topics of the course (all of them are owned by the IMT Library).

- Ronald N. Giere, John Bickle, and Robert Mauldin (2005). Understanding Scientific Reasoning. Wadsworth Inc Fulfillment.
- Gerd Gigerenzer (2008). Rationality for Mortals: How People Cope with Uncertainty. Oxford and New York: Oxford University Press

- Hacking, Ian (2001). An Introduction to Probability and Inductive Logic. New York: Cambridge University Press.
- Darrell Huff (1993). How to lie with statistics. New York: Norton
- Daniel Kahneman (2011). Thinking, Fast and Slow. 1st edition. New York: Farrar, Straus and Giroux
- Richard E. Nisbett (2015). Mindware: Tools for Smart Thinking. New York: Farrar, Straus and Giroux
- Merrilee H. Salmon (2013). Introduction to Logic and Critical Thinking. 6th ed.
- Wesley C. Salmon (1963). Logic. Englewood Cliffs, N.J., Prentice-Hall
- Cass R Sunstein (2009). On Rumors: How Falsehoods Spread, Why We Believe Them, What Can Be Done. New York: Farrar, Straus and Giroux

Final Exam:
Active contribution from the participants is a prerequisite for passing the course.

Prerequisites:
None

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Firms, Business Analytics and Managerial Behavior
Nicola Lattanzi
20 Hours

Learning Outcomes:
Students will learn how to observe and evaluate business behavior, as well as how to locate sources of potential competitive advantage. They will also learn the base to identify organizational barriers and corporate behaviors that sustain or challenge manager decisions and execution of strategies.

Abstract:
The course is based on key business concepts that will support students develop the expertise required to understand and evaluate business behaviors, firms' strategies and financial results. The goal of this course is to give you a solid understanding of the opportunities, techniques, and critical challenges in analyzing firms, business analytics and managerial behavior.
In our lectures we will cover the major issues involved in understanding businesses and decision making, based on fundamental concepts ranging from the theory of the firm, business performances, financial statements, strategy and entrepreneurship.

Lecture Contents:
1. Firm as a system of choices and decisions in progress: theory.
2. The system of forces in a business organization: efficiency in production and effectiveness in results
3. Business performance and ways to represent: quantitative and qualitative languages in accounting. The Financial conditions and the Profit and Loss prospect
4. The fundamental role of Human Being. Human capital and intellectual capital: evolution and analysis
5. Technological progress, occupations and skills in a business combination: the analysis
6. The financial statement. How to read and comprehend performances and results in a business organization: methodology and tools
7. The financial statement. How to read and comprehend performances and results in a business organization: methodology and tools
8. Strategy, forecast simulation versus predictive simulation, Business analytics
9. Entrepreneurship and management in a complex scenario
10. Neuroscience, brain and business

Teaching Method:
Lectures, discussions, business cases, presentations.

Bibliography:
Suggested readings will be provided for each topic.

Final Exam:
Critical paper presentations in groups.

Prerequisites:
Basic knowledge of business economics.

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Forensic and Legal Psychology
Pietro Pietrini
16 Hours

Learning Outcomes:
By attending the course, students will learn the fundamentals of psychology and psychiatry as well as the most innovative applications of cognitive and experimental neuroscience to the forensic field. Students will have a first-hand presentation of ground-breaking cases, including the expert report in the 2009 Trieste Court of Appeal case, the 2011 Como's Court case and others, in which neuroscientific data have been used to corroborate the expert report conclusions. Students will learn the critical aspects and the pitfalls of psychiatric forensic examinations and of expert cross-examination.

Abstract:
Contrary to all the other branches of medicine, diagnostic process in psychiatry still suffers from the (almost) complete absence of objective laboratory tests. which results in a poor diagnostic concordance. Even worse is the case in forensic psychiatry, where matters are more complex as compared to the clinical setting. Faced with the classical forensic question, whether or not the defendant is capable to understand and to will, consultants appointed by the different parts (i.e., the judge, the prosecutor, the defendant, the victim) most of the times reach opposite conclusions - based on their role - which are highly speculative and lack of any objective support . Over the last decade, progressive effort has been put to minimize subjective speculations in forensic psychiatric assessment. Applications of neuroscience methodologies, including structural and functional brain imaging and molecular genetics, have proven to increase objectivity.

Lecture Contents:
* The concept of Free Will in the forensic context. The psychological determinants of behavior. How we make decisions
* Structural and functional brain correlates in decision making processes. How we control (aggressive) behavior. Behavioral abnormalities associated with brain lesions or neurodegenerative disorders. Fronto-temporal dementia.
* Psychopathy and behavior. Psychopathy from a psychiatric perspective. Is there a moral blindness?
* Psychopathy and anti-social behavior. Psychopathy as a predictor of criminal behavior. Inside the brain of psychopathics: structural brain differences between psychopathic individuals and healthy controls.
* The functional neuroanatomy of aggressive behavior in humans. Relevance to the understanding of anti-social behavior
* Genetic bases of personality and behavior. Principles of genetics
* Gene and environment in the modulation of social and anti-social behavior.
* Structural and functional brain imaging examinations in the forensic domain: what can these methods tell us about imputability?
* Behavioral genetic examinations in the forensic domain
* Applications of behavioral genetics and brain imaging examinations in the individual assessment in the forensic domain: the 2009 Trieste Court of Appeal case (the first case in Europe); the 2011 Como Court case

* Acquired paedophilia as a results of brain tumor. Literature review and discussion of a recent Italian case.
* Working research hypothesis: is there a Functional Frontal Fragility Syndrome?

Teaching Method:
The course includes theoretical and methodological face-to-face lessons, with the help of slides and case-report publications. E-learning platform are used to share learning materials (slides, data, publications, etc.). Hands-on lessons will be promoted.

Bibliography:
Lesson slides; selected papers of studies and case reports discussed in class

Final Exam:
Knowledge will be verified throughout the course by student's engagement into discussion in class; a written examination with open questions and multiple choice questions will be administered at the end of the course

Prerequisites:
Basic knowledge of brain imaging methodologies; strongly suggested, though not mandatory, that students have followed the following courses prior to enrolling in this one: Introduction to Cognitive and Social Psychology ; Neurobiology of Emotion and Behavior: Clinical Psychopathology and Psychiatry

Funding and Management of Research and Intellectual Property
Marco Paggi
10 Hours

Learning Outcomes:
How to write a research/mobility project proposal; fundamentals on the management of intellectual property rights.

Abstract:
The long seminar aims at providing an overview of funding opportunities for PhD students' mobility, post-docs, and researchers (Erasmus+ scheme; scholarships by the Alexander von Humboldt Foundation; initiatives by the Deutscher Akademischer Austausch Dienst; scholarships offered by the Royal Society in UK; bilateral Italy-France exchange programmes; Fulbright scholarships; Marie Curie actions; grants for researchers provided by the European Research Council). For each funding scheme, specific hints on how to write a proposal are given. In the second part of the long seminar, fundamentals on the management of intellectual property rights (copyright transfer agreements, open access, patents, etc.) are provided.

Lecture Contents:
- Overview of funding schemes to support research mobility;
- Fundamentals of Intellectual Property Rights (patents, copyrights, etc.)

Teaching Method:
Powerpoint slides

Bibliography:
Handouts are provided to the participants.

Final Exam:
This long seminar has no final exam.

Prerequisites:
None

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Introduction to Cognitive and Social Neurosciences
Pietro Pietrini, Emiliano Ricciardi
24 Hours

Learning Outcomes:

At the end of the course, naïve-to-neuroscience students are expected to have a general background knowledge of general topics of cognitive and social neurosciences, and to get introduced to the basic principles of brain functional techniques and their applicability for assessing neural bases of mental functions.

Abstract:

This course will provide a general overview of different topics in Cognitive and Social Neurosciences and their multidisciplinary and translational applications. The course is intended for those students that – outside the CCSN track – are interested in understanding how the comprehension of the neurobiological basis of perception, cognitive skills, behavior, motor responses and decision-making processes could be meaningful even for their research field. In the first part of the course, we will introduce to the modern methodologies to assess brain responses in the human living brain and familiarize with basic concepts in cognitive and social neuroscience. In the second part, we will review seminal findings that had a major impact on our knowledge of cognitive processes and social interactions, as well as more recent studies that took advantage of neuroimaging, electrophysiology and brain stimulation methods to shed new light on visual art and perception, decision-making and behaviors, economics and business, neuroengineering and robotics.

Lecture Contents:

- Introduction to cognitive neuroscience, interaction of neuroscience with other disciplines, historical perspective of neuroscience; introduction to neuroimaging: advantages and limitations; outline of brain physiology
  Outline of brain anatomy and functional organization, introduction to brain metabolism and implications for cognitive neuroscience and neuroimaging
- Introduction to brain imaging techniques and outline of main research and clinical applications
  Introduction to the neural correlates of selected topics of cognitive and social neurosciences, such as motor control, memory and attention, action understanding, emotion and social interaction, decision-making processes, applied with a multidisciplinary approach in behavioral sciences, economics, or aesthetic perception
- Introduction on wow to design a behavioral or neuroimaging study and an experimental protocol in cognitive and social neurosciences.

Teaching Method:

The course includes theoretical and methodological face-to-face lessons with the help of slides. E-learning platform are used to share learning materials (slides, data, etc.).

Bibliography:

Slides of the course and selected articles will be shared with the students.
Suggested readings:

Cognitive Neuroscience: The Biology of the Mind - Michael S. Gazzaniga, Richard B. Ivry, George R. Mangun
Principles of neural science - Eric R. Kandel, James H. Schwartz, Thomas M. Jessell, Steven A. Siegelbaum, A.J. Hudspeth

Final Exam:
Brief presentation of selected scientific articles

Prerequisites:
None

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Introduction to Network Theory
Guido Caldarelli
10 Hours

Learning Outcomes:
Basic Knowledge of Graph Theory and main results in the application of the methodology to various cases of study

Abstract:
we shall provide a broad overview of the concepts and the methods constituting
modern network theory.

Lecture Contents:
LECTURE 01 Introduction
LECTURE 02 Graph Theory Introduction
LECTURE 03 Properties of Complex Networks I
LECTURE 04 Communities
LECTURE 05 Different kind of Graphs
LECTURE 06 Ranking
LECTURE 07 Static Models of Graphs
LECTURE 08 Dynamical Models of Graphs
LECTURE 09 Fitness Models
LECTURE 10 Financial Networks
AVAILABLE AT http://guidocaldarelli.com/index.php/lectures

Teaching Method:
Power point Lectures (DOWNLOAD AT http://guidocaldarelli.com/index.php/lectures)

Bibliography:
Scale-Free Networks G. Caldarelli
Networks, Crowds and Markets by David Easley and Jon Kleinberg

Final Exam:
essay/discussion with teacher

Prerequisites:
None

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Introduction to Neurolinguistics
Alessandra Rampinini
12 Hours

Learning Outcomes:
Acquiring basic concepts in General Linguistics that can be applied to Neuroscience and the study of language in the brain. Navigating the basic topics in the cognitive neurosciences of language, being able to evaluate and assess methodologies as well as results and theoretical issues related to the discipline.

Abstract:
Linguistics is a social science with a very special feature: it sits at the mind/brain interface. The brain governs our very own biochemistry, giving rise to the biological structures controlling our muscles, ears and breath in verbal languages, or our hands and eyes in the case of sign languages. The mind gives rise to the interpretation of language, as well as memory for meanings and uses, and our own intentions when using language to interact with our peers, knowing that they can understand us. In this course, we will go through these aspects in bird's eye view, studying how single languages came to be in the history of humankind, and how language as a general cognitive ability is controlled by different parts of the brain in a complex system of feedback and feedforward mechanisms.

Lecture Contents:
Introduction to language; functional and structural neuroanatomy of language-dedicated regions; language, handedness and hemispheric specialization; cognitive control in bilingualism; sign language introduction; introduction to language evolution and genetic aspects. Please note: this course is intended for students coming from different backgrounds and tries to be interesting to linguists as well as non-linguists: therefore, and due to time and logistics, some topics need to be overlooked or treated very quickly. The teacher is by all means available for further discussion or enquiries related to other topics if these lie within her own expertise.

Teaching Method:
frontal lesson with media and required interaction, guided discussions.

Bibliography:
Bibliographic suggestions will be given by the teacher in class.

Final Exam:
The final exam will be a closed-answer sheet and will be reserved to those having this class in their study plan. All auditors are welcomed to try it for personal assessment and without a a formal evaluation.

Prerequisites:
None

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Neurobiology of Emotion and Behavior
Pietro Pietrini
12 Hours

Learning Outcomes:
By attending this Course, students will learn the fundamentals of the neurobiological correlates of emotion and behavior and their evolutionary meaning under physiological conditions. Neurobiological correlates and effects of altered mental conditions on emotion and behavior also will be discussed.

Abstract:
The body of knowledge gained in the field of neuroscience in the last quarter of century have changed the way we conceptualize mind, behavior and even human nature. Since the 19th century it has been known that lesions to the cerebral cortex may lead to impairments in specific cognitive functions and in the ability to modulate behavior. The recent development of modern methodologies for investigating brain functions, including positron emission tomography and functional magnetic resonance imaging has made it possible to investigate the neural circuits implicated not only in cognitive processes such as perception, attention, memory and language, but also in more elusive mental functions, including emotion and behavior. In addition, molecular biology and genetics have led to the decoding of the human genome and are now investigating the role that the genetic endowment plays in shaping not only physical, but also personality features, behavior and vulnerability to mental disorders.

Lecture Contents:
* Brain structures involved in emotion and behavior in humans, non humans primates and other vertebrates. Why it is important to study the neurobiological correlates of emotion and behavior in the human brain
* Brain functional and structural correlates of emotion and behavior in humans. How structural and functional brain imaging methodologies can be applied to the in vivo study of human emotion and behavior
* Brain response to fearful stimuli. The role of amygdala. Emotions as a way to enhance signal-to-noise ratio in information processing. Evolutionary meaning of emotional processing
* Mood influence on emotional brain response. Effects of priming on amygdala response to neutral and sad stimuli. Implications for the understanding of the effects of environmental factors on mood balance
* Effects of negative life events on brain structures. Implications for the neurobiology of depression. Effects of meditation on brain structure and function
* Cognitive and emotional determinants in behavioral modulation. From instinct to decision making. The neural correlates of aggressive control in the healthy human brain. Altered structural and functional cortical and subcortical factors in behavioral dysfunctions: implications for mental insanity in the forensic context
* The human genome. Genetic alleles involved in emotional processing and behavior. Genetic vulnerability to mood disorders
* Moral behavior. Cognitive and emotional aspects. The genetic factors that may influence human moral decisions
* Genes and environmental factors in shaping individual social behavior and vulnerability to psychological distress and depression

* Implications of recent neuroscience acquisitions about human emotion and behavior for the social sciences and the law

Teaching Method:
The course includes theoretical and methodological face-to-face lessons, with the help of slides and experimental research publications. E-learning platform are used to share learning materials (slides, data, publications, etc.)

Bibliography:
Lesson slides; selected papers of studies and case reports discussed in class

Final Exam:
Knowledge will be verified throughout the course by student's engagement into discussion in class; a written examination with open questions and multiple choice questions will be administered at the end of the course

Prerequisites:
Basic knowledge of brain imaging methodologies.It is strongly suggested, though not mandatory, that students have followed the following courses prior to enrolling in this one: Introduction to Cognitive and Social Psychology; Basic Principles and Applications of Brain Imaging Methodologies to Neuroscience.

Neuroscience of Perception and Experience-Dependent Plasticity
Emiliano Ricciardi, Davide Bottari
46 Hours

Learning Outcomes:
At the end of the course, students are expected to have specific knowledge of the neurophysiology of perception and of the applications of the most important brain functional techniques toward the investigation of the neuronal basis of perception across different sensory modalities. Students will be also introduced to the topic of sensory deprivation and to the comprehension of how (the lack of) visual experience shapes brain development and function. Moreover, students will learn how neural plasticity and its dependence from environmental input changes along the development.

Abstract:
The course will review the neurophysiological bases of perception in humans. In particular, for each sensory modality, the basic neurophysiology of perception will be described and evaluated with an experimental perspective. The course will consequently detail the neural bases of unimodal, multisensory and supramodal perception. The course will review the literature concerning early and late sensory-deprived individuals to understand how the lack of sensory experience affects brain functional and structural development. Moreover, the course will review the specificity of neural plasticity in early phases of the development, describing sensitive and critical periods from a functional and structural perspectives. Finally the course will review studies showing the differences between the neural plasticity occurring during childhood and in adulthood.

Lecture Contents:
- Introduction to perception and sensory experience; definition perception vs. sensation and sensory modalities; common features across sensory modality; perception and imagery.
- Perception: methodological approaches, advantages and pitfalls.
- The bodily senses: definition, subtypes, the skin and mechanoreceptors, physiology of bodily senses, central pathways, neural correlates of active and passive touch, brain imaging approaches applied to touch-based experimental design.
- Pain and nociception, physiology and central processing of pain ('pain matrix'). Brain imaging of pain perception, pain anticipation and pain modulation.
- The Auditory system: anatomy, auditory perception, functional organization (anterior/posterior), computational neuroscience of auditory perception.
- Chemical senses. Physiology of olfaction and taste. Brain imaging applied to the assessment of the neural correlates of chemical senses.
- The visual system. Physiology of vision, the eye and the central visual pathways. Brain imaging approaches to the investigation of the visual system. The functional organization of the ventral and dorsal extrastriate patterns. Maps and modules in the ventral stream. Neural basis of face perception.
- Multisensory I and II. What is multisensory processing, behavioral and neural correlates.
- Cross-modality I and II. Heteromodal responses in sensory deprived models (animal and human) and in typical development.

- Supramodality, definition and indications from the research in blind individuals. Functional features of supramodality and discussion on the open questions on the topic.
- Functional and Structural Development I and II. Definition and examples of sensitive and critical periods. Physiological basis. Review of sensitive periods in vision. Perceptual narrowing. Unisensory and multisensory functional development.
- Experience dependent plasticity I and II. Developmental and adulthood experience dependent plasticity. Probabilistic learning and perceptual training in animal and human models.

Teaching Method:
The course includes theoretical and methodological face-to-face lessons with the help of slides. E-learning platform are used to share learning materials (slides, data, etc.).

Bibliography:
Slides of the course and scientific papers that are relevant to the presented topics.
Suggested readings:
Cognitive Neuroscience: The Biology of the Mind - Michael S. Gazzaniga, Richard B. Ivry, George R. Mangun
Principles of neural science - Eric R. Kandel, James H. Schwartz, Thomas M. Jessell, Steven A. Siegelbaum, A.J. Hudspeth

Final Exam:
Learning outcomes are verified through oral presentations on selected topics.

Prerequisites:
None

Philosophical and Ethical Themes in Neuroscience
Mirko Daniel Garasic
10 Hours

Learning Outcomes:
Speculating over the ethical and political acceptability of certain innovations in the light of classical philosophical questions will provide the groundworks for any further neuroethical investigation envisaged.

Abstract:
Since its formal establishment as a self-standing field, neuroethics has been divided into two subdefinitions: the neuroscience of ethics and the ethics of neuroscience. While the neuroscience of ethics aims at explaining the way our brain works in relation to moral judgement, the ethics of neuroscience is a further expansion of bioethics: a discipline that wants to assess the moral dilemmas specifically raised by recent biotechnological advancements. This introductory course will focus on neuroethics in this latter sense, underlining the impact that discoveries concerning our brain can, do or will have on our society. Speculating over the ethical and political acceptability of certain innovations in the light of classical philosophical questions (i.e. What is justice? What constitutes a good life?) and other key terms necessary to understand the current debate (i.e. authenticity and personal identity, autonomy, responsibility and competence) will provide the groundworks for any further neuroethical investigation envisaged.

Lecture Contents:
Neuroethical Issues

Teaching Method:
Lectures and seminars

Bibliography:
Subject to change.

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- -Farah, M. J. (2005). Neuroethics: the practical and the philosophical. Trends in Cognitive Sciences, 9(1), 34–40.
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- Open your mind. (2002). The Economist.
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- Vincent, N. A. (2010). On the Relevance of Neuroscience to Criminal Responsibility. Criminal Law and Philosophy, 4(1), 77–98.
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- Erler, A. (2011). Does Memory Modification Threaten Our Authenticity? Neuroethics, 4(3), 235–249.
- Mehlman, M. J. (2004). Cognition-Enhancing Drugs. Milbank Quarterly, 82(3), 483–506.
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- Lavazza, A., & Garasic, M. D. (2017). How Non-invasive Brain Stimulation Might Invade Our Sphere of Justice. Journal of Cognitive Enhancement, 1–8.
- Memories could be erased to cure soldiers of PTSD, say scientists. (2017). The Telegraph.

Final Exam:
No

Prerequisites:
None

IMT SCHOOL FOR ADVANCED STUDIES LUCCA

Philosophy and Neuroscience in Moral Reasoning
Gustavo Cevolani
12 Hours

Learning Outcomes:
On completing the course, the students will be able to appreciate the main issues surrounding the cognitive and neural foundations of morality, and to rigorously analyze and discuss them. They can also assess the relevance of empirical findings for current debates on ethics, cognition and for sensitive social issues more generally.

Abstract:
The analysis of moral reasoning and surrounding topics – how to assess "good" and "bad" actions, how to choose between them, how to justify these choices – is a classical problem of moral philosophy (ethics). More recently, moral psychologists started tackling those problems using a descriptive, empirically based approach. Still more recently, "neuroethicists" began investigating the neural correlates of moral judgment and the implications of neuroscientific results for moral philosophy. The course is an introduction to the essential issues arising at the interface between neuroscience, moral psychology, and moral philosophy. We shall explore problems concerning the biological and neural bases of moral thinking, the role of emotions in moral reasoning, the significance of empirical results for normative theories of morality, and some methodological issues arising within neuroethics.

Lecture Contents:
The topic of each lesson will be decided at the beginning of the course on the basis of student's feedback; the following is a tentative list subject to change.

Lecture 1. Presentation, discussion and choice of specific topics. Philosophical theories of moral reasoning. Consequentialism, deontology, and virtue ethics
Lecture 2. Dual-process theories of reasoning and cognition. Empirical approaches to morality.
Lecture 3. Moral dilemmas. Moral psychology and the neuroscience of ethics.
Lecture 4. Evolutionary approaches. Hume's problem. Reductionism and the debunking of morality.
Lecture 5. Objectivity, reason, and facts in moral reasoning. Machine ethics.
Lecture 6. Recap, verification and general discussion.

Teaching Method:
Mixture of lectures and discussion seminar.

Bibliography:
We won't have a textbook; the reading list will be shared later. The following are suggestions for background readings:

- David Edmonds (2013). Would You Kill the Fat Man?. Princeton University Press
- Antonio R. Damasio (2004). Descartes' Error: Emotion, Reason and the Human Brain. New York: Quill

- Jonathan Haidt (2013). The Righteous Mind: Why Good People Are Divided by Politics and Religion. Vintage
- Joshua Greene (2013). Moral Tribes: Emotion, Reason, and the Gap Between Us and Them. Penguin

Final Exam:

Active contribution from the participants is a prerequisite for passing the course.

Each student will select a paper or topic related to the fields of neuroethics, moral psychology, moral philosophy, or the philosophy of neuroscience and give a 20–30 minutes presentation during one of the classes. The talk should present, clearly and concisely, a topic/problem/thesis, relevant arguments/results supporting or undermining it, and a final assessment. Students can choose among the suggested readings or propose a topic of their choice.

Prerequisites:

None

Philosophy of Science
Gustavo Cevolani
20 Hours

Learning Outcomes:
On completing the course, the students will be better able to understand and evaluate current debates about the reliability, the rationality and the limits of science. They can assess the scope and limits of scientific knowledge and appreciate the differences and relations between science and other scientific endeavors. They understand why and to which extent science is rational and often successful, and what is its role in guiding decision-making in modern societies.

Abstract:
The course provides an introduction to the basic concepts and problems in the philosophical analysis of scientific reasoning and inquiry. We will focus on some central patterns of reasoning and argumentation in science and critically discuss their features and limitations. Topics covered include the nature of theory and evidence, the logic of theory testing, and the debate about the aims of science and the trustworthiness of scientific results. We shall discuss classical examples and case studies from the history and practice of science to illustrate the relevant problems and theoretical positions. Students will freely engage in brainstorming on these topics and are welcome to propose examples, problems, and methods from their own disciplines.

Lecture Contents:
The topic of each lesson will be decided at the beginning of the course on the basis of student's feedback; the following is a tentative list subject to change.

Lecture 1. Presentation of the course. Discussion and choice of specific topics. What is science?
Lecture 2. How many sciences? The method(s) of science. Exact and inexact sciences.
Lecture 3. Theories, models, data. Experiments and observations.
Lecture 4. Inferences in science. Falsification, confirmation, disconfirmation.
Lecture 5. Science, pseudoscience, junk science. Trust and objectivity in science. The role of experts.
Lecture 6. History of science and scientific progress. The aim(s) of science.
Lecture 7. Science, truth, and reality.
Lecture 8. Recap, verification and general discussion.

Teaching Method:
Mixture of lectures and discussion seminar.

Bibliography:
We won't have a textbook or a proper reading list. Relevant readings will be shared on Google Drive. The following are suggestions for background readings and possible topics of discussion.

- Curd, Martin and J. A. Cover, eds. (1998). Philosophy of science: the central issues. New York: W.W. Norton.

- Godfrey-Smith, Peter (2003). Theory and Reality: An Introduction to the Philosophy of Science. University of Chicago Press.
- Okasha, Samir (2016). Philosophy of Science: A Very Short Introduction. Oxford
- University Press.
- Oldroyd, D. R. (1986). The Arch of Knowledge: An Introductory Study of the History of the Philosophy and Methodology of Science. Methuen.
- Hempel, C. G. (1966). Philosophy of Natural Science. Prentice Hall.
- Popper, Karl (1963). Conjectures and Refutations: The Growth of Scientific Knowledge. Routledge.
- Salmon, Wesley C. (2017). The Foundations of Scientific Inference. Pittsburgh, Pa: University of Pittsburgh Press.
- Sprenger, Jan and S. Hartmann (2019). Bayesian Philosophy of Science. OUP Oxford.

Final Exam:
Active contribution from the participants is a prerequisite for passing the course.

Prerequisites:
None

Scientific Writing, Dissemination and Evaluation
TBD
8 Hours

Course description will be available soon.

Strategies and Business Behavior
Nicola Lattanzi
20 Hours

Learning Outcomes:
Students will learn how to analyze business behaviour and evaluate strategies, as well as how to locate sources of potential competitive advantage from a perspective that, for the purpose of this course, encompasses the internal and dynamic fit of a strategy. They will also learn how to identify organizational barriers and corporate behaviors that sustain or challenge the development and execution of strategies, and the competitive advantage of a company.

Abstract:
The course is based on key business concepts that will support students develop the expertise required to understand business behaviour and evaluate strategies. The course will describe strategy and decision-making in today's world, how to identify organizational barriers and advantages for the development of firms' strategies, also following the behavioral perspective. The essential "tool-kit" that combines a broad understanding of strategies, businesses and behavioral strategies and the new challenges of businesses in today's world.

Lecture Contents:
1. Fundamentals of Business Behavior
2. Fundamentals of Strategy
3. Market and strategy: volatility and development
4. The strategic management
5. A focus on specific firms and competitive advantage
6. Business behavior and patterns of innovation
7. Behavioral strategy: rational approach, heuristic system and cognitive biases
8. Cyber-time and cyber-space for humans and virtual humans: business dynamics and organizations
9. Business behavior and behavioral strategy: fundamentals and case study. A short view on a critical business behavior
10. Data Science for business: network theory for strategy and management
11. The extra-ordinary life of patterns and trends: how to learn for a business organization?

Teaching Method:
Lectures, discussions, business cases, presentations.

Bibliography:
Suggested readings will be provided for each topic.

Final Exam:
At the end of the course students will be required to prepare and discuss a conceptual framework after reading three selected papers.

Prerequisites:
None