Foundation Year Programme 2020/21: Courses Contents

GENERAL CLASS

Intensive Italian Language Course
This course provides students with language skills needed to achieve the levels A1 A2 of the Common European Framework of Reference for Languages (CEFR) in Italian. Grammar, vocabulary and communication skills are taught and practiced in class using up-to-date publications and additional materials supplied by the teachers. At the end of the course, students are expected to be able: to understand sentences and frequently used expressions related to areas of immediate relevance; to communicate in routine tasks requiring a direct exchange of information on familiar and routine matters; to describe aspects of their background, immediate environment and matters in areas of immediate need. Further training is given in speech logics and technical terminology needed to successfully take faculty entrance exams.

HUMANITIES CLASS

Art History
Following the chronology and the iconographic apparatus present in the volume The Story of Art by E.H. Gombrich, the course introduces students to the study of art history, from Greek and Roman antiquity to avant-garde experimentations of the first half of the 20th century, providing the basic critical tools for historical-artistic analysis. The first part of the course offers a general overview of the main trends and styles of the protagonists of European art from ancient Greece to the Baroque. Particular attention was given to Italian Renaissance. The second part of the course focuses on the study of contemporary art, from Neoclassicism to the 1920s. In this section of the course the major artistic movements that emerged between the second half of the 18th century and the first half of the 20th century are analysed, in particular: Neoclassicism, Romanticism, Realism, Impressionism, Post-Impressionism, French and German Expressionism, Cubism, Futurism, Dadaism and Surrealism.

History of Fashion
The course aims at providing students with knowledge and critical competences on the relationships between fashion, culture and society in Italy during the XX century. Fashion can be defined as a cultural phenomenon as it is concerned with meanings and symbols
that mediate the relationship between the individual and the social world. Fashion may be defined as the cultural construction of the embodied identity. When we talk about fashion, then, we do not refer only to dress, shoes and accessories, but to social representations and communication among individuals within a specific society. Focusing on the XX century Italian society and in particular on the women role in the origins of Made in Italy, the course will analyse how fashion was (and still is) part of a complex system where it is inextricably intertwined with culture, social structures, politics and economics. During the course students will be provided with materials (slides, journal articles, videos, documentaries, photos) that will be collectively discussed in class.

**Italian History**

The course aims at providing an understanding of the events and key issues which have characterised the 19th and 20th centuries: from the Vienna Congress to the recent challenges of the globalised world. An itinerary marked by the continuous confrontation between continuity and breaking points, conflicts and stabilisation: the long 19th century and the industrial revolution, nation-building, liberalism and democracy, mass society, world conflicts, cold war and the overcoming of the European horizon. The interpretations of the Republic. The course aims to reconstruct the path of the long post-war Italian period from the end of the Second World War to the present. Particular attention will be paid to the possible periodization, to the complex set of available sources, to the successive phases of the Republican political system, to the link between the internal framework and the international context.

**Italian Literature**

**SCIENCE CLASS**

**Biology**

The course introduces students to the main subjects of Biology: The cell — Cell theory, prokaryotic and eukaryotic cells, animal and plant cells, specialized cell structures; The molecules of life — The properties of water, the specific properties of biomolecules and their functions; Nucleic acids — Structure and functions. DNA replication. DNA mutations and DNA repair mechanisms. DNA transcription: regulation of gene expression and mRNA processing. Protein synthesis: genetic code and translation process; Cell division — Mitosis and cell cycle. Meiosis; Proteins — Amino acids and peptide bond, the structure of proteins (primary, secondary, tertiary and quaternary structures). Fibrous proteins (collagen), globular proteins (hemoglobin), enzymes; Sugars — Structure and functions. Carbohydrate metabolism: cellular respiration and photosynthesis; Lipids — Structure and functions. Biological membranes. Viruses — Structural features and replication strategies.

**Chemistry**


**Physics**


Mathematics