

Optional course – main information	
Academic subject	Human Phylogenesis and Evolution
ECTS credits (CFU)	4
Compulsory attendance	Yes
Teaching language	Italian
Accademic Year	2019/2020

Professor/Lecturer	
Name & SURNAME	Eligio Vacca
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Tel.	080-5442058
Tutorial time/day	Tuesday, 9.30 - 11.30, on appointment by e-mail in the remaining days

Course details	Pass-fail exam/Exam with mark out of 30	SSD code	Type of class
	Exam with mark out of 30	BIO/8	Lecture

Teaching schedule	Semester	day and time (afternoon)	room
	II		

Lesson type	CFU/ECTS	Lessons (hours)	CFU/ECTS lab	Lab hours	CFU/ECTS tutorial/workshop	Tutorial/workshop hours	CFU/ECTS field trip	Field trip Hours
	4	32						

Time management	Total hours	Teaching hours	Self-study hours
	82	32	50

Academic Calendar	First lesson	Final lesson
	01/10/2019	23/12/2020

Syllabus	
Gill	Knowledge of basic skeletal anatomy.
Expected learning outcomes (according to Dublin Descriptors) (it is recommended that they are congruent with the learning outcomes contained in A4a, A4b, A4c tables of the SUA-CdS)	
<i>Knowledge and understanding</i>	Knowledge of the Hominins phylogeny, of their origin and biological evolution. Understanding the evolutionary processes that originated the various human forms.
<i>Applying knowledge and understanding</i>	Application of phylogenetic models to highlight the nodal events of the emergence and development of the various forms of the human line. Ability to explain the evolutionary meaning of certain polymorphisms with adaptive meaning and some aspects of the current human variability.
<i>Making informed judgements and choices</i>	Autonomous skills in the evaluation and interpretation of paleontological, morphological and paleo-molecular data in the study of human phylogenesis.
<i>Communicating knowledge and understanding</i>	Ability to communicate the basic aspects of man's natural history and the variability of ancient and recent human groups.
<i>Capacities to continue learning</i>	Acquisition of the ability to understand evolutionary dynamics at the origin of the human line and its variability.

Syllabus	
Course content	The Human Phylogeny as a natural history of man, fundamental concepts, principles and methods. Modern taxonomic systems, evolutionary theories, Charles Darwin and Alfred R. Wallace, evolution by natural selection, the modern synthesis, the problem of

	<p>the origin of man.</p> <p>Times of human evolution, bioseries, geological dating, paleo-environmental reconstruction, biofractionation.</p> <p>The Primates, taxonomy and phylogeny, origins, radiation and divergences. Plio-pleistocene hominids, Pre-Australopithecines, Australopithecines, Paranthropus, origins, variability, evolution of bipedal locomotion, relevant fossils.</p> <p>The genus Homo, appearance, the process of encephalization, implications on sexual dimorphism, relevant fossils.</p> <p>The first diffusion of Humans in Eurasia, geographic differentiations and phylogenetic implications.</p> <p>The first human peopling of Europe, the Neanderthal cline, characterization, hypothesis on the origin, diffusion, relevant fossils.</p> <p>The anatomically modern humans, theories on the origin and diffusion, relevant fossils.</p> <p>Phylogenetic relationships between anatomically modern humans and other archaic forms, contribution of the molecular anthropology.</p> <p>Outline of intraspecific variability of the current human populations, some adaptive polymorphisms.</p>
Course books/Bibliography	<p>R.G. Klein, 2009. The Human Career. Human Biological and Cultural Origins. Univ. of Chicago Press.</p> <p>C. Stringer &amp; P. Andrews, 2012. The Complete World of Human Evolution. Thames &amp; Hudson Pub., London - New York.</p> <p>B. Wood, 2019. Human Evolution: A Very Short Introduction. Oxford University Press; 2 ed., ISBN-10: 0198831749</p>
Notes	Additional lecture notes to complete the study and for updates.
Teaching methods	Lectures, powerpoint presentations, videos, physical and virtual replicas of Hominids.
Assessment methods (indicate at least the type written, oral, other)	Written test and oral examination.
Evaluation criteria (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are)	<p>Evaluation of the acquired knowledge in the unitary framework of human phylogenesis.</p> <p>The ability to integrate and contextualize paleontological, morphological and molecular data in the reconstruction of the evolutionary dynamics of the human phyletic line is required.</p> <p>Assessment of the capacity for critical discussion of the evolutionary models currently proposed in relation to the origin of current and past human forms.</p> <p>Knowledge of some aspect of human variability and understanding of their possible adaptive meaning.</p>
Further information	