



EPICUR
**European Partnership for an Innovative
Campus Unifying Regions**

**Implementation of a new
LAS-programme at P2 AMU:
1 curricular programme**

Task lead: 5A I

Deliverable prepared within the framework of the EPICUR European University Alliance with the support of the Erasmus+ Programme of the European Union: KA2: Cooperation for innovation and the exchange of good practices/ EUROPEAN UNIVERSITIES/ Pilot call for proposals: EAC-A03-2018



WP3: Innovative learning & teaching formats for European citizens of the future

Contents

1	Introduction	4
1.1	Context	4
1.1.1	European Universities Alliances initiative	4
2	Program description	5
2.1	Content	5
2.1.1	Introductory classes	5
2.1.2	Disciplinary classes	6
2.1.3	Elective classes	6
2.2	Organisation	6
2.3	Evaluation	6
2.4	Connection to EPICUR	6
2.5	Future Plans	7
3	Program outline	8
4	Attachments	10
4.1	Course Handbook for academic year 2020/2021	10

1 Introduction

1.1 Context

1.1.1 *European Universities Alliances initiative*

At the European Council of 14 December 2017, Heads of State and Government called on Member States, the Council and the European Commission to take forward work on "European Universities", which are bottom-up networks of universities across the EU that will enable students to obtain a degree by combining studies in several EU countries and will contribute to the international competitiveness of European universities.

The Education Council Conclusions of 22 May 2018 further stressed the potential of 'European Universities' to "significantly enhance mobility and foster high quality and excellence in education and research, by strengthening the link between teaching, research and innovation and knowledge transfer, by demonstrating the benefits of multilingual learning, the recognition of qualifications and by developing joint education and research programmes and projects." They also highlighted that the European Universities "could play a flagship role in the creation of a European Education Area as a whole".

To achieve this objective, the European Commission proposes an unparalleled initiative which requires a quantum leap in cooperation between all types of higher education institutions from all regions in Europe and at all levels of the organisation, across all areas of activity, from teaching and learning to research and innovation.

Following two calls for Erasmus+ projects for European universities in 2019 and 2020, 41 alliances representing 280 higher education institutions have received funding of €5 million each from the European Commission for the three-year pilot phase.

European Universities' have an ambitious mandate to trigger unprecedented levels of institutionalised cooperation making it systemic, structural and sustainable. As such, European Universities aim at achieving the following two objectives:

- Promoting **common European values** as enshrined in article 2 of the Treaty on European Union and a **strengthened European identity** by bringing together a new generation of Europeans, who are able to cooperate and work within different European and global cultures, in different languages, and across borders, sectors and academic disciplines.
- Reach a substantial leap in **quality, performance, attractiveness and international competitiveness of European higher education institutions** and contributing to the European knowledge economy, employment, culture, civic engagement and welfare. 'European Universities' will be key drivers to boost the quality of higher education and where possible to strengthen its link to the research and innovation landscape in Europe and its outreach towards the society and economy.

The term "Universities" should be understood in its broadest sense, including all types of Higher Education Institutions. The European Universities initiative responds to a **long-term vision** that has the potential to transform the institutional cooperation between higher education institutions and bring it to the next level.

1.1.2 *EPICUR: European Partnership for an Innovative Campus Unifying Regions*

EPICUR, the European Partnership for an Innovative Campus Unifying Regions, is a first-generation European University Alliance, dedicated to shaping European Society in Transition through the development of collaborative inter- and transdisciplinary teaching and learning.

EPICUR's key objective is to become a role model for a European University in boosting the mobility (be it physical, virtual, or blended) of our students, teachers, researchers and staff across the alliance's Inter-University Campus. Thereby offering a broad student body access to innovative, research-inspired academic training programmes with a distinct European signature. During the pilot phase, EPICUR will adopt a step-by-step approach through testing enhanced levels of cooperation and integration on four key areas of activity: strategic policy development, innovative pedagogies, developing a platform for a virtual EPICUR campus, and connecting regional networks.

1.1.3 Partners of the alliance

Institution name and acronym	Country
Université de Strasbourg (UNISTRA)	France
Uniwersytet im. Adama Mickiewicza w Poznaniu (AMU)	Poland
Aristotelio Panepistimio Thessalonikis (AUTH)	Greece
Universität für Bodenkultur Wien (BOKU)	Austria
Karlsruher Institut für Technologie (KIT)	Germany
Université de Haute-Alsace (UHA)	France
Albert-Ludwigs-Universität Freiburg (ALU-FR)	Germany
Universiteit van Amsterdam (UvA)	The Netherlands

2 Program description

2.1 Content

Liberal Arts and Sciences at AMU is a three year interdisciplinary BA program. It seeks to equip students with a range of universal competences (writing, public speaking, critical thinking) and fundamental knowledge from the main fields of research. An ideal graduate should be a person of unexhausted curiosity and broad horizons, dedicated to the pursuit of truth, but at the same time able to meet the demands of the modern market and society.

The LAS program at AMU consists of three main parts: (1) introductory classes, (2) disciplinary classes, (3) elective classes.

2.1.1 Introductory classes

Introductory classes seek to provide students with a framework of general knowledge. Such an introduction will help them to organize and process knowledge from the specific fields of study. These classes are scheduled mainly (but not exclusively) for the first year of education. This group contains classes dealing with philosophical, ethical and methodological issues. Special attention is paid to the matter of research in the digital era and the challenges of interdisciplinary research. The content of the program emphasizes its historical roots,

therefore we have a class focused on the tradition of *artes liberales*. Additionally, each student has to take 60 hours of classes in ancient Latin and Greek.

Language skills are another point of focus of the program. In addition to the classical languages, the program includes 360 hours of English training. There are also two academic writing classes: one in Polish and one in English.

2.1.2 *Disciplinary classes*

Classes representing specific disciplines of research take the largest part of the program. They are meant to broaden the perspective of the students. It contains classes from history, history of art, religious studies, psychology, maths, physics, biology, geography, law, management and economy. As a result, three great domains of research: humanities, life sciences and social sciences are represented in the program.

2.1.3 *Elective classes*

To suit individual interests of the students, starting from the 3rd semester, each student takes two elective classes. In two years each student takes 8 elective classes, chosen from the offerings of 8 faculties of AMU.

2.2 Organisation

In 2020 Rector of AMU established the Centre for Liberal Arts and Sciences. This unit is responsible for administrative issues, international cooperation, promotion and all other initiatives related to LAS at AMU. Due to legal demands, however, each program has to be attached to a specific university faculty. Therefore LAS is formally registered at the Faculty of History. This matter impacts the number of history classes in the curriculum.

Also in 2020, to meet the demands of recent changes of education law in Poland, the Rector of AMU established the Scientific Council of LAS. The council consists of both teachers and students involved in the program. Its responsibility is to apply changes in the curriculum of LAS and to craft acts of legislation related specifically to the program.

Normally all the classes should take place at the *Collegium Historicum*, newest building of the modern AMU Campus in the northern part of Poznań. Currently, due to COVID legislations all classes take place online via MS Teams platform.

2.3 Evaluation

As mentioned before, students choose their representatives to the Scientific Council of the LAS. Their voice is taken into account during the meetings and has already impacted the structure of the curriculum. Meetings take place once per month.

In addition to this, all the students had an opportunity to express their thoughts at an informal meeting after the first semester. The staff of LAS hopes to organize such meetings on a regular basis.

2.4 Connection to EPICUR

Structure of the LAS program was built with a consideration of already established LAS programs in Freiburg and Amsterdam. Specific classes from these programs have their counterparts in

AMU program. This solution facilitates future mobility of LAS students inside EPICUR consortium.

2.5 Future Plans

Recent changes in legislation obligate the Scientific Council of LAS to apply minor changes in the curriculum. Another source of modifications is the feedback from the students. They asked for changes in the distribution of life sciences classes and increasing the number of conversation-based courses (seminars). These changes will start to apply in the academic year 2021/2022.

Currently, all the classes (apart from language ones) are taught in Polish. Plans are to start an English group in 2021/2022. Staff of LAS hopes to attract a group of 20 international students through social media marketing.

3 Program outline

N.	Name of the class	Semester	Lecture (n. of hours)	Seminar (n. of hours)	Discussions (n. of hours)	Form of examination *	ECTS Points
1st year, 1st semester							
1.	Tradition of the Liberal Arts		30			T	4
2.	Research and Presentation			30		T	3
3.	Written Expression			30		T	4
4.	Theory of Knowledge			30		E	6
5.	Dealing with Numerical Information			30		T	3
6.	Modern Language (English)				60	T	4
7.	Ancient Language (Latin)				30	T	3
8.	English for Academic Purposes				30	T	3
9.	Fundamentals of OSH				5	T	0
10.	Introduction of Library Services				5	T	0
11.	Physical Education				30	T	0
Summary - 1st semester		310	30	120	160		30
1st year, 2nd semester							
1.	Knowledge in Context		30			T	3
2.	Theory of Science		30			E	6
3.	Science in Context			30		T	2
4.	Research Design Across Disciplines			30		T	2
5.	Responsibility and Leadership			30		T	2
6.	History of Europe and its Borders		30			E	6
7.	Modern Language (English)				60	T	4
8.	Ancient Language (Latin)				30	T	3
9.	English for Academic Purposes				30	T	2
10.	Physical Education				30	T	0
Summary - 2nd semester		330	90	90	150		30
Summary - 1st year		640	120	210	310		60
2nd year, 3rd semester							
1.	Philosophy and History of the Mathematics		30			T	3
2.	Economic Conditions of Civilization Development		30			E	6
3.	Man in the World of Sounds		30			T	2
4.	Fine Arts in the History of European Civilization, part 1		30			T	3
5.	Interpersonal Communication				30	T	2
6.	History of Light		30			T	2
7.	Digital Revolution in Science		30			T	2

8.	Modern Language (English)				60	T	4
9.	Ancient Language (Greek)				30	T	2
Elective courses							
10.	Elective Subject – one of two subjects proposed by the Faculty of Mathematics		30			T	2
11.	Elective Subject – one of two subjects proposed by the Faculty of Physics		30			T	2
Summary - 3rd semester		360	240		120		30
2nd year, 4th semester							
1.	Introduction to Earth and Environmental Sciences		30			T	2
2.	Geographical Conditions of the Civilization Development		30			T	2
3.	Fundamentals of the Theory of Evolution		30			E	6
4.	Fine Arts in the History of European Civilization, part 2		30			T	3
5.	Biotechnology		30			T	3
6.	Advanced Digital Humanities			30		T	2
7.	Research Project				30	T	2
8.	Modern Language (English)				60	T	4
9.	Ancient Language (Greek)				30	T	2
Elective courses							
10.	Elective Subject – one of two subjects proposed by the Faculty of Biology		30			T	2
11.	Elective Subject – one of two subjects proposed by the Faculty of Geography		30			T	2
Summary - 4th semester		360	210	30	120		30
Summary - 2nd year		720	450	30	240		60
3rd year, 5th semester							
1.	Great Religions of the World		30			T	3
2.	Human Aspects of Biochemical Research		30			T	3
3.	Psychological Contexts of Human Behaviors		30			T	3
4.	Theoretical and Philosophical Foundations of Social and Political Sciences		30			E	4
5.	Evolution and Dynamics of the Planetary System		30			T	3
6.	Logic			30		E	4
7.	Modern Language (English)				60	T	4
8.	Research Project				30	T	1

9.	BA Seminar			15		T	1
Elective courses							
10.	Elective Subject – one of two subjects proposed by the Faculty of Social Sciences		30			T	2
11.	Elective Subject – one of two subjects proposed by the Faculty of Political Sciences		30			T	2
Summary - 5th semester		345	210	45	90		30
3rd year, 6th semester							
1.	Migrations in the History of the European Continent		30			T	3
2.	Law and Political Systems		30			T	3
3.	Humans and the Environment		30			T	3
4.	Elementary Mathematics		30			T	3
5.	Introduction to Governance		30			E	6
6.	Language and Knowledge		30			T	2
7.	Modern Language (English)				60	T	4
8.	BA Seminar			30		T	2
Elective courses							
9.	Elective Subject – one of two subjects proposed by the Faculty of Modern Languages		30			T	2
10.	Elective Subject – one of two subjects proposed by the Faculty of Polish Language		30			T	2
Summary - 6th semester		330	240	30	60		30
Summary - 2nd year		675	450	75	180		60
Summary - all three years		2035	1020	315	730		180

4 Attachments

4.1 [Course Handbook for academic year 2020/2021](#)

MODULE HANDBOOK 2020/2021

LIBERAL ARTS AND SCIENCES

ADAM MICKIEWICZ UNIVERSITY

FIRST YEAR

Tradition of the Liberal Arts			
Study area	Core		
Workload	90 h (of which 30h attendance)	Year	1st
Course Format	lecture	Credit Points	4 ECTS
Module Coordinator	prof. dr hab. Kazimierz Ilski / prof. UAM dr hab. Rafał Witkowski		
Prerequisites	None		
Module content & objectives	The main aim of the course is to familiarize students with the specificity of the <i>artes liberales</i> tradition from ancient to modern times, their role in the history of European civilization and the modern educational concept of Liberal Arts and Sciences.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) explain basic theories describing the development and functioning of liberal arts throughout history (2) understand the role and importance of liberal arts in the cultural, social and political development of European civilization (3) characterize specificity of liberal arts and describe their role in the history of civilization (4) recognize the relationship between the development of the humanities and experimental sciences and the cultural tradition of the European civilizational circle (5) analyze sources for the history of liberal arts at the basic level (6) discuss the role of liberal arts in the history of European science and civilization at a basic level 		
Methods of assessment & grading structure	Oral colloquium		

Research and Presentation			
Study Area	Core		
Workload	90 h (of which 30h attendance)	Year	1st
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	prof. UAM dr hab. Rafał Dymczyk		
Prerequisites	None		
Module content & objectives	The goal of the module is to discuss the most important methods of conducting scientific research and define what they are. We will also consider how to search for and verify data, present it in different contexts and apply in practice. The module will also prepare students to work in groups and research teams.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) name the most popular research methods and methodologies (2) run basic scientific research by applying necessary competences (3) acquire and compile research data (4) cooperate with other people in research groups (5) popularize results of research that he conducts 		
Methods of assessment & grading structure	Written exam, oral exam, multimedia presentation		

Written Expression			
Study Area	Core		
Workload	100h (of which 30h attendance)	Year	1st
Course Format	seminar	Credit Points	4 ECTS
Module Coordinator	prof. UAM dr hab. Krzysztof Skibski		
Prerequisites	None		
Module content & objectives	<p>In this module, We seek to consider the following topics: natural language in relation to different situations of communication, contemporary theories of communication, ways of understanding semantics in contemporary linguistics (together with critical analysis of chosen research papers). We will also analyze qualities of scientific language, especially in polish (lexis, syntax, text) and basic principles guiding redaction of scientific text (in relation to conventions of polish research standards).</p>		
Learning Goals	<ol style="list-style-type: none"> (1) knows and understands basic semantic theories in contemporary linguistics as well as specifics of multifactorial change in contemporary language (2) knows and understands selected terms from the field of contemporary linguistics, especially semantics and contexts specific of critical analysis of meaning of those terms (3) knows and understands in wide range context specific for analysis of chang in ways of thinking about language characteristic for european thought from 19th century until present (4) reading comprehension of selected scientific texts from the field of general linguistics, especially linguistic semantics (5) can properly redact, comment and attach footnotes to a simple scientific texts prepared according to the academic standards (6) is prepared to discuss scientific problems, as well as for popularizing results of research in a non-specialist language 		
Methods of assessment & grading structure	Written colloquium, oral colloquium, test, report		

Theory of Knowledge			
Study Area	Core		
Workload	30h (of which 105h attendance)	Year	1st
Course Format	lecture	Credit Points	6 ECTS
Module Coordinator	prof. UAM dr hab. Mateusz Stróżyński		
Prerequisites	None		
Module content & objectives	The module aims to familiarize students with the most important concepts of cognition in a historical perspective, from the concepts of antiquity to the twentieth-century philosophy of science. Students will be able to discuss the most important problems and questions related to human cognition and knowledge, and to point out the timeliness of historical discussions about them.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) discuss main issues in the field of epistemology and explain their importance (2) list the main epistemological positions and present their characteristics (3) present historical evolution of epistemological positions by epochs (4) consider the role of epistemological issues in the conduct of the research process 		
Methods of assessment & grading structure	Oral exam covering material from the module		

Dealing with Numerical Information			
Study Area	Core		
Workload	90h (of which 30h attendance)	Year	1st
Course Format	seminar	Credit Points	3 ECTS
Module Coordinator	prof. UAM dr hab. Maciej Michalski		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) presentation of the specifics of humanistic contents in the internet 2) identification of efficient ways of searching, selection and analysis of digital information 3) presentation of workshop techniques helping to apply digital contents for research 4) difference between digitized and and “born digital” contents 5) presentation of institutions dedicated for collecting and sharing digital contents 6) presentation of basic problems related to copyright in the internet 7) presentation of ethical problems related to presentation and using of online content 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) understand terminology and basic research problems related to digital technologies (2) efficiently search, select and analyse digital resources (3) use tools dedicated to storing and analyzing digital information (4) differentiate digitized and “born-digital” internet contents (5) list main institutions collecting and sharing humanist contents in the internet (6) find materials shared based on specific legal license (7) discuss ways of legal access to internet content (8) identify basic ethical problems related to sharing contents in internet (9) react on encountering cases of illegal and unethical using of internet contents 		
Methods of assessment & grading structure	Assessment of student’s preparation for the module and his activity in the module; assessment of final projects		

Ancient language (latin)			
Study Area	Core		
Workload	180h (of which 60h attendance)	Year	1st
Course Format	discussions	Credit Points	3+3 ECTS
Module Coordinator	dr Marcin Loch		
Prerequisites	Acquaintance of latin alphabet		
Module content & objectives	<p>The goal of the module is the immersive, practical learning of classical Latin using the method of contextual induction. The module is planned for 60 hours, so it provides for acquiring basic skills needed to work with the Latin text that can be implemented in this hourly dimension. Language skills and knowledge acquired during the module will enable participants to continue learning Latin quickly and effectively.</p> <p>comprehension reading of latin text and giving answers for the questions about the text.</p>		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) read and understand latin text appropriately adapted for adequate level (2) ask in latin about the text passages or words, which he don't understand (3) understand simple latin statements and answer to them in latin (4) compose in latin simple summary of selected text 		
Methods of assessment & grading structure	Written test covering material from the module		

English for academic purposes			
Study area	Core		
Workload	180h (of which 60h attendance)	Year	1st
Course Format	discussions	Credit Points	3+3 ECTS
Module Coordinator	dr Christopher Korten		
Prerequisites	Students need to have a minimum level of English of B1		
Module content & objectives	<p>The goal of the module is to think and write critically and at an acceptable academic level. Students will be asked to complete weekly tasks designed to develop these skills. By the end of the module, students will have the skills necessary to write an academic essay. This includes possessing the requisite writing skills and analytical skills. As well, students will be able to think critically in analyzing the strength of arguments and effectively employ evidence in their essays.</p>		
Learning Goals	<p>Upon successful completion of this module, students</p> <ol style="list-style-type: none"> (1) are able to think critically and determine weak arguments from strong ones (2) know the basic methods of analysis and interpretation of historical sources and knows how to use the lists of information on social sources (such as bibliographies, repertory, archival inventories, digital databases) (3) can conduct a critical analysis of sources and interprets them using basic research methods (4) can write an academic essay and understands the structure and linguistic range of such essays (5) understand the need to comply with ethical standards in the work of an academic and can differentiate between summarizing and paraphrasing and plagiarizing 		
Methods of assessment & grading structure	Writing and research assignments throughout the semester		

Knowledge in Context			
Study Area	Core		
Workload	70h (of which 30h attendance)	Year	1st
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	dr Rafał Paweł Wierzchosławski		
Prerequisites	None		
Module content & objectives	<p>The subject-matter of the Knowledge in Context module is to draw attention to the phenomenon of science in the framework of the emergence of scientific knowledge from other types of human knowledge and its further transformation in history</p> <p>Module contents:</p> <ul style="list-style-type: none"> (a) visions of European science from Aristotle to post-positivism); problem of the unity of science in its development; conditions for the development and transformation of particular scientific disciplines (b) development phases of science, from antiquity to possible future developments (c) the diversity of knowledge and its social recognition (institutions, education process, research) (d) the problem of universal character of scientific rationality in the context of other types of human knowledge (indigenous, local, religious and philosophical) (e) the demarcation of science and non-science (pseudo-science, proto-science) (f) the importance of scientific institutions, social and economic mechanisms, scientific culture and state scientific policy for innovation in science and technology. 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ul style="list-style-type: none"> (1) describe basic scientific methods in the course of history (2) describe main periods of the development of science (3) describe science as a specific form of human knowledge, especially it's rationality (4) describe impact of knowledge development on social, economical and political issues (with a focus on factors of innovation) 		
Methods of assessment & grading structure	Written test covering material from the module		

Theory of Science			
Study Area	Core		
Workload	60h (of which 30h attendance)	Year	1st
Course Format	lecture	Credit Points	6 ECTS
Module Coordinator	dr Rafał Paweł Wierzchosławski		
Prerequisites	None		
Module content & objectives	<p>The theory of science presents basic information on the phenomenon of science (scientific language, exploratory cognition and its products, including the fruits of science, cognition as a form of education and scientific and research institutions). The discussed concept of science is to indicate those elements which are common to all sciences. At the same time, we point to the distinctive characteristics of different types of sciences, as well as sciences of science (meta-science).</p>		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) describe basic aspects of scientific language, subject, aim and scientific method (2) describe specific stages of scientific cognition and types of scientific methods (3) describe nature of science as well as structure and dynamics of scientific theories (4) describe ongoing debates about relevant methodological problems 		
Methods of assessment & grading structure	Written test covering material from the module		

Science in Context			
Study Area	Core		
Workload	83,5h (of which 30h attendance)	Year	1st
Course Format	seminar	Credit Points	3 ECTS
Module Coordinator	mgr Paweł Grad		
Prerequisites	<ul style="list-style-type: none"> (1) basic reading comprehension of theoretical text (2) ability to understand english academic text (3) basic ability to summarize and represent arguments contained in a text 		
Module content & objectives	<p>Aim of the module is to present to students the impact of historical, anthropological and social context on the form of scientific research. Moreover, students will acquire basic theoretical tools helping to assess the range and limitations of the aforementioned impact. Science, and exact sciences in specific, are regarded as superior ways of acquiring knowledge about the world. Their objective, fact-oriented nature inclines to ignore the role of the context in which research is taking place, context random by its very nature. In the first place, the impact of theory as a whole and its relation with the extra-scientific cognitive bargain on the results of observational reports and empirical experiments. Therefore consciousness of that problem should be the basis of each scientist's..</p>		
Learning Goals	<ul style="list-style-type: none"> (1) understand how to apply the notion of “context” in the epistemology of empirical observation (2) understand the importance of a conceptual scheme for the conduct of empirical observation (3) understand the importance of the invention of writing for science (4) understand the relation between the development of the technique of perspective and development of observation methods (5) understands the importance of the printing invention for the development of modern science 		
Methods of assessment & grading structure	10-minute test from the paper under discussion every two weeks; final oral colloquium covering topics from the module.		

Research Design Across Disciplines			
Study Area	Core		
Workload	90h (of which 30h attendance)	Year	1st
Course Format	seminar	Credit Points	2 ECTS
Module Coordinator	prof. UAM dr hab. Rafał Dymczyk		
Prerequisites	None		
Module content & objectives	<p>Topics discussed in the module:</p> <ul style="list-style-type: none"> (1) basic information and skills in the field of knowledge acquisition, information management skills (acquisition and interpretation of data from various sources) (2) running an individual project (3) group work (4) application of practical knowledge, adaptation to new conditions (5) understanding of other cultures and customs, projects; appreciation of cultural and multicultural diversity in research 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ul style="list-style-type: none"> (1) list the most popular research methods, refer to the knowledge gained during classes (2) run basic scientific research by applying necessary competences (3) plan conduct of research (4) characterize the basic differences in the culture of individual countries discussed 		
Methods of assessment & grading structure	Written test covering material from the module: oral exam, written exam, multimedia presentation		

Responsibility and Leadership			
Study Area	Core		
Workload	60h (of which 30h attendance)	Year	1st
Course Format	seminar	Credit Points	2 ECTS
Module Coordinator	dr Rafał Paweł Wierzchosławski		
Prerequisites	None		
Module content & objectives	<p>The module introduces students into important debates of our times by presenting various approaches which tend to comprehend and resolve the problems in question. How can one be responsible for understanding and dealing with global problems on different levels of responsibility (individual, local, national or transnational one). We stress mutual interconnection of problems arising in various areas, its complexity and multidimensionality. Such a consciousness should protect students from over-hasty judgments and develop critical thinking habits.</p>		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) describe contemporary problems emerging from the process of historical change (modernisation, totalitarianism, end of history) (2) describe problems related to globalisation and economisation of socio-political systems (3) describe problems related to the status of different types of knowledge and technology in contemporary societies (4) describe issues related to the development of knowledge and technology - post-truth and transhumanism 		
Methods of assessment & grading structure	Written test covering material from the module		

History of Europe and its Borders			
Study Area			
Workload	90h (of which 30h attendance)	Year	1st
Course Format	lecture	Credit Points	6 ECTS
Module Coordinator	prof. UAM dr hab. Rafał Witkowski		
Prerequisites	None		
Module content & objectives	The main aim of the module is to familiarize students with the specificity of history of the European continent, characteristics of the distinctiveness of European development in comparison with other continents (Africa, Asia, America), the development of European civilization and its spread in the nineteenth and twentieth centuries.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) explain theories describing development and functioning of European civilization (2) understand the role of religion in the cultural, social and political development of European civilization (3) characterize the cultural specificity of European civilization and its role in the history of the continent (4) recognize connections between different regions of the continent of Europe and their mutual relations over the centuries (5) analyze sources for the history of Europe at the basic level (6) run a discussion about the history of Europe at the basic level 		
Methods of assessment & grading structure	Oral exam		

SECOND YEAR

Philosophy and History of Mathematics			
Study Area	Major		
Workload	60h (of which 30 h attendance)	Year	2nd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	prof. dr hab. Roman Murawski		
Prerequisites	None		
Module content & objectives	<p>The aim of the subject is a lecture on philosophical issues related to mathematics preceded by an introduction to philosophy. As part of the lecture, students will also get acquainted with the main facts of the history of mathematics.</p> <p>Covered topics:</p> <ol style="list-style-type: none">(1) general introduction to philosophy.(2) philosophy of mathematics in ancient Greece(3) contemporary positions in the philosophy of mathematics(4) mathematics in antiquity(5) mathematics of the Middle Ages(6) modern mathematics		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none">(1) knows the basic concepts and problems of philosophy(2) knows the main concepts in the field of mathematics(3) knows the main facts and trends in the development of mathematics		
Methods of assessment & grading structure	Written test covering material from the module		

Economic Conditions of Civilization Development			
Study Area	Major		
Workload	130 h (of which 30h attendance)	Year	2nd
Course Format	lecture	Credit Points	6 ECTS
Module Coordinator	prof. UAM dr hab. Tadeusz Janicki		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> (1) economy and civilisation - terminology and periodisation (2) technical, scientific and economic grounding of geographical discoveries (3) genesis and development of capitalism from 15th to 17th century; merchant capitalism (4) from agrarian revolution to green revolution (5) industrial revolutions and their economical and social outcome (6) mechanisation of transport and communication - world is shrinking (7) processes of urbanisation and industrialisation of cities (8) colonialism - expansion and domination of western civilisation (9) industrial and post-industrial society (10) mass culture and its social and economical aspects (11) economic, social and cultural globalisation at the turn of 20th and 21st age 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) understand economical and civilisational processes, as well as stages of economical and civilisational development (2) explain specifics of ages: preindustrial, industrial and postindustrial. (3) understand the terms and notions related to the subject of the module (4) collect information, conduct an interdisciplinary analysis of socio-economic problems, formulate conclusions, present and defend his theses (5) present an attitude of respect for different views and use acquired knowledge and competences to explain and assess past and present socio-economic processes in a creative way 		
Methods of assessment & grading structure	Written test covering material from the module		

Man in the World of Sounds			
Study Area	Major		
Workload	55h (of which 30h attendance)	Year	2nd
Course Format	lecture	Credit Points	2 ECTS
Module Coordinator	dr hab. Piotr Podlipniak		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> (1) transfer of knowledge about the specifics of human sound perception (2) specifics of sound as a source of knowledge about surrounding world (3) specifics of sound as a medium of communication (4) presentation of the specifics of psychic perception of spectral and spectral-temporal qualities of sound (5) presentation of specifics of psychic perception of time in perception of sound phenomena (6) presentation of expressive dynamics as developmentally old component of human expression of sound (7) sound specifics of basic emotional messages of human being (8) Humboldt's view of music and speech as systems (9) presentation of basic problems of semantics of music (10) presentation of the audiosphere concept 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) define sensual parameters of sound (2) describe basic aspects of human perception of sound (3) describe known forms of humans sound communication (4) explain features of Humboldt's system (5) distinguish different forms of meaning encoded with sound (6) characterize specifics of psychic sound perception of human being 		
Methods of assessment & grading structure	Written test covering material from the module		

Fine Arts in the History of European Civilization, part 1 and 2			
Study Area	Major		
Workload	360h (of which 60h attendance)	Year	2nd
Course Format	lecture	Credit Points	3+3 ECTS
Module Coordinator	dr hab. prof. UAM Michał Mencfel		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> (1) image and cult: role of image (work of art) in cultic and magical practices (2) birth of an image: towards ontology of image in the modern era (3) image as an instrument of power: role of the work of art in the practices of legitimization and propaganda of authority (4) image as an instrument of power (5) image as a collectible: museum as a cultural phenomenon (6) work of art as a work of art: from realism to symbolism, from symbolism to abstraction (7) image as an instrument of social change: avantgarde's utopia (8) surplus of images: contemporary visual culture (popular culture, advertisement, internet) 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) explain the phenomenon of image (work of art) in the history of european civilisation (2) describe the role of a work of art in magical and cultic practices (3) analyze role of a work of art in the system of power/knowledge (4) describe the process of autonomisation of artistic discourse since the modern times (5) describe the phenomenon of museum of art from its beginnings until present (6) describe and analyze critically role of the images (works of art) as means of persuasion in the present world (7) conduct a critical analysis of a work of art 		
Methods of assessment & grading structure	Written test covering material from the module		

Interpersonal communication			
Study Area	Core		
Workload	30h of attendance	Year	2nd
Course Format	workshop	Credit Points	ECTS
Module Coordinator	prof. UAM dr hab. Mateusz Stróżyński		
Prerequisites	None		
Module content & objectives	<p>The aim of the workshop is to experience functioning in a group and to learn basics of communication and interpersonal skills (eg communicating their emotions and needs, assertiveness). All classes will take place on one day.</p> <p>Module contents:</p> <ul style="list-style-type: none"> (1) dynamics of group processes (2) emotions in the internal human experience; their classification (3) assertive attitude - characteristics and requirements 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ul style="list-style-type: none"> (1) explain dynamics of basic group processes (2) identify and communicate your own emotional states (3) identify other people's emotional states and take appropriate responses (4) assertively and respectfully present your own position and refuse 		
Methods of assessment & grading structure	Assessment of activity during the workshop		

History of Light			
Workload	130h (of which 40h attendance)	Year	2nd
Course Format	lecture/discussion/ laboratory	Credit Points	2 ECTS
Module Coordinator	dr hab. Tomasz Pędziński		
Prerequisites	None		
Module content & objectives	<p>The module includes both theoretical backgrounds presented in the form of traditional lectures (with some experiments presented by the lecturer) and the experimental, hands-on part in the research laboratories.</p> <p>Specific contents:</p> <ol style="list-style-type: none"> (1) history of breakthroughs in light-related sciences – most important scientific discoveries over the centuries (2) principles of photo-sciences (3) light sources and detectors (4) chemical and physical properties of molecules in their excited states (5) photochemical processes in biological systems (6) practical applications of spectroscopy (incl. laser spectroscopy) 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) list the breakthroughs in light-related sciences since the beginning of time (2) explain how the most popular light sources are built (3) understand construction of light detectors of different kinds (4) explain the principles of operation and construction of light-related spectroscopic devices and their wide-spread applications in industry and medicine (5) perform simple (and more advanced) spectroscopic measurements and critically evaluate the obtained results (6) explain the significance of spectroscopic methods to many fields of science and industrial applications (7) report experimental results in a commonly acceptable way; apply proper terminology and technical software (8) formulate conclusions from the experiments and avoids over-interpretation 		
Methods of assessment & grading structure	Participation in discussion, assessment of research project, involvement in the work in laboratory, final exam		

Digital Revolution in Science			
Study Area	Core		
Workload	50h (of which 30h attendance)	Year	2nd
Course Format	lecture	Credit Points	2 ECTS
Module Coordinator	dr hab. Karol Bartkiewicz		
Prerequisites	understanding of mathematics on the high school level		
Module content & objectives	<p>Aim of the module is development of knowledge and skills related with acquiring and analyzing of abilities of modern informatic solutions in the context of civilisation</p> <p>Module contents:</p> <ul style="list-style-type: none"> (1) what are the capabilities of our computers and their networks? (2) how to read a paper about quantum informatics? (3) what is machine learning and what are its advantages and disadvantages? (4) digital currencies 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ul style="list-style-type: none"> (1) understand risks and opportunities for civilisation related to development of informatics; can analyze new information solutions on that angle (2) critically assesses sources of information offering conclusions about contemporary and future informatic tools (3) apply acquired informatic knowledge to form messages and interpretations of specific contents for specific target groups (4) can individually and collectively form understandable and correct oral and written message related to data processing technologies 		
Methods of assessment & grading structure	Project, written colloquium		

Ancient language (Greek)			
Study Area	Core		
Workload	100h (of which 60h attendance)	Year	2nd
Course Format	discussions	Credit Points	2+2 ECTS
Module Coordinator	dr hab. Rafał Rosół		
Prerequisites	None		
Module content & objectives	<p>Aims of the module:</p> <ul style="list-style-type: none"> (1) transfer of knowledge of alphabet and phonetics of ancient greek language and development of ability to use the alphabet in writing and reading (2) transfer of knowledge in the field of basic greek vocabulary (3) transfer of knowledge about the system of grammar (4) learning skill of translation of simple prepared texts (5) learning skill of noticing influences of language and culture of Greece on modern culture and languages 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ul style="list-style-type: none"> (1) use greek alphabet actively and passively (2) use basic terms of greek language (3) understand basic principles of greek grammar (4) translate simple text in ancient greek language 		
Methods of assessment & grading structure	Written test covering material from the module		

Introduction to Earth and Environmental Sciences			
Study Area	Major		
Workload	70h (of which 30h attendance)	Year	2nd
Course Format	lecture	Credit Points	2 ECTS
Module Coordinator	prof. UAM dr hab. Małgorzata Mazurek		
Prerequisites	basic general geographic knowledge at the high school level; ability to use cartographic studies		
Module content & objectives	<p>The aim of the module is to present:</p> <ul style="list-style-type: none"> (1) elements, structure and functioning of the Earth system and its subsystems (2) spatial diversity of physico-geographical environment of the Earth (3) cause-effect relationships between individual elements of the natural environment and subsystems on a global scale 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ul style="list-style-type: none"> (1) describe the structure and functioning of the Earth system, its subsystems and environmental system (2) present the spatial distribution of individual components of the geographical environment (geological structure, terrain, climatic, hydrographic and pedological conditions) on a global scale (3) analyze dependencies between planetary subsystems on a global scale (4) identify and characterize the features of the natural environment and explain their genesis (5) interpret and evaluate natural phenomena and processes (6) use scientific literature on the subject of lectures, electronic sources, cartographic studies 		
Methods of assessment & grading structure	Written test covering material from the module		

Geographical Conditions of Civilisational Development			
Study Area	Major		
Workload	70h (of which 30h attendance)	Year	2nd
Course Format	lecture	Credit Points	2 ECTS
Module Coordinator	prof. UAM dr hab. Mirosław Makohonienko		
Prerequisites	basic natural, geographical and historical knowledge at the secondary school level as well as knowledge acquired at earlier stages of studies. Recommended curiosity, the ability to ask questions and conduct discussions, combine knowledge from different disciplines.		
Module content & objectives	The module aims to familiarize with the geographical determinants of the development of the civilization of the ancient and modern world. Classes show the impact of the natural environment and its changes on the functioning of highly organized human societies. They aim to stimulate reflection on the role of man in the management of limited terrestrial resources and the attitude to the living creatures. They point to the key role of human thought in overcoming or undergoing emerging environmental challenges. The subject shows the value of connections between social sciences, humanities and natural sciences in solving key civilization problems.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) describe influence of the environment on various aspects of human functioning (2) define the role of environmental diversity in the development of great civilizations (3) list contemporary problems related to the state of the natural environment (4) take into account the need for environmental responsibility in their actions and choices 		
Methods of assessment & grading structure	Written test covering material from the module		

Fundamentals of the Theory of Evolution			
Workload	180 h (of which 30h attendance)	Year	2nd
Course Format	lecture/laboratory	Credit Points	6 ECTS
Module Coordinator	prof. dr hab. Jacek Radwan		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) the theory of natural selection 2) genetic models of natural selection 3) the accident in evolution: the role of genetic drift. 4) evolution of new and complex features 5) levels of natural selection: genes, individuals and macroevolution 6) analysis of the conflict with the help of evolutionary game theory 7) the evolution of cooperation and biological altruism 8) the evolution of life stories 9) evolution of sexes 10) sexual selection and conflict of sexes 11) origin of species 12) coevolution 13) the evolution of Homo sapiens 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) explain main assumptions of the theory of evolution (2) explain the emergence of new species and traits (3) differentiate specific levels of evolutionary processes (genes, individuals and macroevolution) (4) describe the links between modern theory of evolution and genetics and game theory (5) demonstrate the relationship of evolutionary processes with the phenomena of natural selection, gender selection and genetic drift (6) consider the issues of relationships in the communities of living beings both within the species (conflict, cooperation, altruism) as well as between different species (coevolution) (7) characterize the evolutionary conditions of human existence 		
Methods of assessment & grading structure	Assessment of activity during lectures, assessment of work results in the laboratory		

Biotechnology			
Study Area	Major		
Workload	65h (of which 30h attendance)	Year	2nd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	dipl. ing. dr. nat. techn. Jakub Rybka		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) history of biotechnology. 2) fundamentals of Biotechnology (division) and discussion of individual branches. 3) plant Biotechnology (green biotechnology) 4) biotechnology of the Sea (blue biotechnology) 5) medical biotechnology (red biotechnology) 6) industrial biotechnology (white biotechnology) 7) biotechnology in the social aspect (purple biotechnology) 8) biotechnology related to bioterrorism and biological weapons (dark biotech.) 9) nanobiotechnology (gold biotechnology) 10) basics of Bioinformatics 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) describe the history of biotechnology (2) describe the basics of biotechnology (3) describe green, white, red, white, purple, dark and gold biotechnology (4) explain the use of nanomaterials in biotechnology (5) explain the use of 3D printing in biotechnology (6) describe the basics of bioinformatics 		
Methods of assessment & grading structure	Presence at the lectures, final exam (minimum of 60% correct answers); in case of negative assessment the exam can be retaken twice		

Advanced Digital Humanities			
Study Area	Core		
Workload	72h (of which 30 h attendance)	Year	2nd
Course Format	seminar	Credit Points	2 ECTS
Module Coordinator	prof. UAM dr hab. Konrad Dominas		
Prerequisites	basic computer skills; active account on the website of University Library		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) preparing students to work with source databases (including Perseus Digital Library, JSTOR, CEEOL) and databases of journals and scientific papers: Scopus; Web of Science; Google Scholar 2) advanced use of Word and Excel in the work of a humanist 3) introduction to the main ideas of Mind Mapping and information design 4) advanced use of PowerPoint and Prezi for the presentation of research and scientific results 5) learning about the tools used to create and position websites; introduction to HTML 5.0 6) getting to know the tools and principles of digitizing and sharing information in the WWW 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) use humanistic databases in an advanced way and also check the impact factor of a given scientific journal (2) use Word and Excel in an advanced way (3) design a scientific information space, using the most important assumptions of mind mapping (4) create an advanced multimedia presentation in the PowerPoint and Prezi programs (5) use one of the programs for creating websites on the basic level as well as use the most important functions of the Google AdWords program; can write a simple script in HTML 5.0 (6) digitize any scientific text and put it on the web. 		
Methods of assessment & grading structure	Written test covering material from the module, multimedia presentation		

THIRD YEAR

Great Religions of the World			
Study Area	Major		
Workload	90h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	prof. UAM dr hab. Maciej Michalski		
Prerequisites	None		
Module content & objectives	<p>The main aim of the module is to familiarize students with the specificity of the great religions, their characteristics and their role in the history of the world.</p> <p>Module contents:</p> <ol style="list-style-type: none"> 1) religion as a research problem - a review of theories 2) religion as a cultural system 3) Judaism and its history 4) Buddhism and its history 5) Hinduism and its history 6) Christianity and its branches 7) Islam and its history 8) native religions and their specificity 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) understand basic theories describing the development and functioning of religion (2) understand the role of religion in cultural, social and political development (3) characterize the cultural specificity of major religions and describe their role in the history of civilization (4) recognize relationship between the dogmas of religion and the cultural tradition of individual civilization circles (5) analyze basic sources for the history of religion (6) discuss the role of religion in the history of the world at a basic level 		
Methods of assessment & grading structure	Oral colloquium		

Human aspects of biochemical research			
Study Area	Major		
Workload	60h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	dr Marta Fik		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) ethics in biochemical tests on human organisms 2) historical aspects of biochemical tests on human organisms 3) contemporary aspects of biochemical tests on human organisms 4) rules and course of clinical tests 5) comparison of procedures in biochemical and psychological tests on human beings 6) side effects of biochemical tests on human organisms 7) morality of researchers conducting biochemical tests on human organisms 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) describe ethical standards in biochemical tests on human organisms (2) present historical aspects of biochemical tests on human organisms (3) present contemporary aspects of biochemical tests on human organisms (4) explain Rules and course of clinical tests on human organisms (5) describe and compare course of biochemical and psychological tests on human beings (6) describe side effects of biochemical tests on human (7) understand and discuss problems related with morality of researchers conducting biochemical tests on human organisms (8) understand, appreciate and propagate work ethics in own action and other people's (9) understand relations between natural sciences and humanities, constantly improve level of his knowledge 		
Methods of assessment & grading structure	Final exam; minimum 60% correct answers; in case of a negative grade, it is possible to retake the exam		

Psychological Contexts of Human Behaviors			
Study Area	Major		
Workload	105h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	prof. UAM dr hab. Mateusz Stróżyński		
Prerequisites	None		
Module content & objectives	<p>The aim of the module is to familiarize students with the most important concepts of man, his personality and behavior in modern psychology, especially with psychological paradigms, translating into psychological practice: psychodynamic, cognitive-behavioral and humanistic-existential. The subject will also refer to elements of social and developmental psychology.</p> <ol style="list-style-type: none"> 1) man as a subject of psychological research 2) main schools in modern psychology 3) man in terms of psychodynamic school 4) man in terms of the cognitive-behavioral school 5) man in terms of humanistic-existential school 6) social psychology - selected issues 7) developmental psychology - selected issues 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) determine the specificity of psychology as a science about a human being (2) characterize the main currents of modern psychology, explain specificity of their of understanding of man and compare them with each other (3) present basic issues in the field of human development psychology and social behavior (4) use theories and concepts in the field of psychology to describe their own and other people's behavior, both individual and group 		
Methods of assessment & grading structure	Written test covering material from the module		

Theoretical and Philosophical Foundations of Social and Political Sciences			
Study Area	Major		
Workload	110h (of which 30 h attendance)	Year	3rd
Course Format	lecture	Credit Points	4 ECTS
Module Coordinator	dr Bartosz Hordecki		
Prerequisites	basic knowledge about theory of research and philosophy of science		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) specifics of social sciences 2) specifics of political science 3) pluralism of theoretical and philosophical groundings in social and political science 4) naturalism. 5) antipositivism. 6) functionalism and behaviourism 7) institutionalism and neoinstitutionalisms 8) interpretationism 9) social constructivism 10) postmodernism. 11) normativism. 12) modern critique of philosophical and theoretical foundations of social and political sciences 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) explain specifics of social and political sciences (2) characterize philosophical foundations of social and political sciences (3) characterize theoretical foundations of social and political sciences (4) discuss relations between main schools of thought constituting sphere of theoretical and philosophical foundations of social and political sciences (5) present contemporary controversies related to the development of theoretical and philosophical foundations of social and political sciences 		
Methods of assessment & grading structure	Assessment of student's participation in the module, final exam covering material from the module		

Evolution and Dynamics of the Planetary System			
Study Area	Major		
Workload	70h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	prof. UAM dr hab. Piotr A. Dybczyński		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) beginnings of civilization and beginnings of astronomy, the oldest observations and interpretations. 2) astronomy at the service of ancient societies: time, calendar, anticipation of phenomena. 3) old views on the structure of the Universe 4) the Copernican revolution 5) development of observation techniques: eye, telescope, photography, electronics. 6) new theories explaining the movements of celestial bodies, the theory of universal gravitation. 7) stars and astronomy of objects outside the solar system 8) the development of galactic and extragalactic astronomy 9) theories of the origin and evolution of the Solar System 10) the development of observational and theoretical astrophysics, its impact on the philosophy of nature 11) socioeconomic importance of contemporary astronomical research 12) cosmic threats to the Earth and its inhabitants 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) understand historical development of astronomical research, notions, concepts, research methods and interpretation of results (2) link important astronomical discoveries with cultural and social changes and changes (3) understand the social and cultural significance of astronomical research (4) understand various social, ethical and philosophical challenges posed by contemporary astronomical research results 		
Methods of assessment & grading structure	Essay, oral colloquium		

Logic			
Study Area	Core		
Workload	90h (of which 30h attendance)	Year	3rd
Course Format	seminar	Credit Points	4 ECTS
Module Coordinator	prof. dr hab. Roman Murawski		
Prerequisites	None		
Module content & objectives	The aim of the module is to present propositional calculus and calculus in axiomatic terms and to discuss the basic problems of set theory. The student will learn the classical logic system and see how it applies to the formalization of mathematical theories. The student will also learn about the concept of proof and consequence and their metalogic properties.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) work in the axiomatic system of propositional calculus (2) construct formal proofs (3) work in the axiomatic system of predicate calculus (4) identify and assess correctness of deductive theories (5) use basic terms of theory of multiplicity 		
Methods of assessment & grading structure	Written test covering material from the module		

Migrations in the History of the European Continent			
Study Area	Major		
Workload	90h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	prof. UAM dr hab. Rafał Witkowski		
Prerequisites	None		
Module content & objectives	The main aim of the module is to familiarize students with the most important events affecting different types of migration to and from the European continent throughout history from prehistoric times to the twentieth century, as well as the multilateral meaning of movement of various groups of the population within the continent as a result of economic and political migration, religious, etc.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) list and describe the basic events and theories explaining the causes, course and effects of migration (2) understand basic categories of scientific description of the phenomenon of migration as a historical process (3) use terminology, concepts and theories that take into account the importance of migration in the history of individual states, nations and societies (4) recognize the relationship between the development of states, nations, culture, religion and migration (5) analyze various types of sources related to the description of migration processes at the basic level (6) discuss the relationship between the history of states and nations and migration processes at the basic level 		
Methods of assessment & grading structure	oral exam covering material from the module		

Law and Political Systems			
Study Area	Major		
Workload	60h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	dr Krzysztof Duda		
Prerequisites	None		
Module content & objectives	<p>Module contents:</p> <ol style="list-style-type: none"> 1) sketch of the history of law; jurisprudence; legal system; constitutional law 2) political system - problems of defining; different takes and elements; qualities of democratic and nondemocratic regimes; problems of contemporary democratic states 3) essence, types and content of constitution; forms of democracy; election systems 4) form of government; party system; essence, types and functions of political parties 5) analysis of political systems in selected countries: Great Britain, USA, Germany, Switzerland and France 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) properly apply notion from the field of jurisprudence presented in the module, especially from the field of constitutional law and political systems (2) list basic types of political systems, classify them and characterize their political institutions (3) apply knowledge to interpret legal texts; provide a basic commentary for a legal act; write and redact such texts and point at a pattern for a specific type of legal act (4) characterize regime and functioning of political system of selected contemporary states (5) explain role of political institution on the base of analysis of competence (6) engage himself in the activities of government, non-government and local government organisations 		
Methods of assessment & grading structure	Written test covering material from the module		

Humans and the Environment			
Study Area	Major		
Workload	75h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	prof. UAM dr hab. Mirosław Makohonienko		
Prerequisites	basic natural, geographical and historical knowledge at the secondary school level as well as knowledge acquired at earlier stages of studies. Recommended curiosity, the ability to ask questions and conduct discussions, combine knowledge from different disciplines.		
Module content & objectives	The aim of the module is to familiarize students with the relationship between man and the natural environment in the long process of cultural development of the human race, from the paleolithic stage with its gatherer-hunting economy, through early agricultural communities of the Neolithic period, the birth of urban communities, the first civilizations to the times of the industrial revolution and the modern IT world. Attention will be paid to the geographical diversity of the natural and cultural environment reaching beyond Europe on the African, Asian, American and Oceania continent.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) list main problems raised in the research on human relations with the environment (2) separate and characterize the main stages in the relationship between man and the natural environment (3) list and characterize the forms of organization of human communities in their historical development (4) explain importance of cultural and geographical diversity in the relations between man and the environment (5) recognize contemporary problems related to interactions on the man-environment line 		
Methods of assessment & grading structure	Written test covering material from the module		

Elementary Mathematics			
Study Area	Major		
Workload	60h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	3 ECTS
Module Coordinator	dr hab. Karol Bartkiewicz		
Prerequisites	understanding of mathematics on the high school level		
Module content & objectives	<p>Aim of the module is development of knowledge and skills related to acquisition and creation of scientific knowledge with help of basic mathematical concepts applied in exact, technical and social sciences.</p> <ol style="list-style-type: none"> 1) How to read a research paper with results presented in the language of mathematics? How to get ready for that? 2) What knows every natural scientist using mathematics in his research? (common mathematical functions and numerical parameters) 3) What is statistics really about? 4) Typical errors in interpretation of measurable quantities. Which units and standards should be applied and expected? 5) Interdisciplinary universality of mathematical language in scientific communication. How can experts from different fields get to understand each other? 		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) apply knowledge from the field of mathematics to form messages abouts specific problem for specific target group (2) critically assess sources of information providing numerical data and determine whether they are research-based or not (3) individually and collectively form understandable and correct oral and written message related to mathematics 		
Methods of assessment & grading structure	Written report, colloquium, multimedia presentation		

Introduction to Governance			
Study Area	Major		
Workload	60h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	6 ECTS
Module Coordinator	prof. UAM dr hab. Jarosław Jańczak		
Prerequisites	None		
Module content & objectives	The main goal of the module is to familiarize students with basic theories, concepts and notions, as well as to equip them with practical skills necessary for group leadership.		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) define essence and sphere of interest of management; name and explain stages of project cycle, enumerate methods of analysis of subject preparing project (2) point at potential sources of funding for projects; characterize ways of building project actions and methods; explain rules of constructing project budget (3) analyze problems and aims of project with the help of project's aims and problems tree; create description of project problem; find a project contest (4) interpret conditions of contest; prepare documentation of project; choose target group of project; choose proper means of measurement for scheduled actions (5) cooperate with other people in project tasks; use assertiveness in self-management and establishing relationships (6) see relation between effectiveness of project work and necessity of further advancement of professional skills; can work systematically and create project tasks in planned way motivate/engage members of team and solve tensions in the group (7) consciously apply proper techniques of creative thinking (8) point out/interpret/resolve/decrease barriers of critical thinking identify essence and source of leadership; knows types of leadership and sources/types of power 		
Methods of assessment & grading structure	<p>Formative: assessment of activity, assessment of participation in discussions and tasks related to the module, assessment of projects</p> <p>Final: exam related to the content of lectures and mandatory literature</p>		

Language and Knowledge			
Study Area	Major		
Workload	90h (of which 30h attendance)	Year	3rd
Course Format	lecture	Credit Points	2 ECTS
Module Coordinator	prof. UAM dr hab. Rafał Witkowski		
Prerequisites	None		
Module content & objectives	<p>The main aim of the module is to familiarize students with the most important theories on the origin of language, the relationship between language, thinking and reality, both in the historical context and in the light of contemporary research. The aim of the module is to make students aware of the multifaceted relationship between language and cognition, language and writing.</p>		
Learning Goals	<p>Upon successful completion of this module, students are able to...</p> <ol style="list-style-type: none"> (1) explain basic theories describing the functioning of language (2) understand the basic categories of using language as a tool for cognition and communication (3) use terminology, concepts and theories that take into account cognitive and linguistic processes (4) recognize the relationship between language development and the development of ways to record it (5) analyze the types of language expression at the basic level (6) discuss links between language and cognition at the basic level 		
Methods of assessment & grading structure	oral exam covering material from the module		

Electives	
Study Area	Electives
Module content & objectives	<p>During the second and third year, student must take 8 elective courses (16 ECTS) offered by different departments:</p> <p>3rd semester:</p> <ul style="list-style-type: none"> ● one of two subjects proposed by the Faculty of Mathematics ● one of two subjects proposed by the Faculty of Physics <p>4th semester:</p> <ul style="list-style-type: none"> ● one of two subjects proposed by the Faculty of Biology ● one of two subjects proposed by the Faculty of Geography <p>5th semester:</p> <ul style="list-style-type: none"> ● one of two subjects proposed by the Faculty of Social Sciences ● one of two subjects proposed by the Faculty of Political Sciences <p>6th semester:</p> <ul style="list-style-type: none"> ● one of two subjects proposed by the Faculty of Modern Languages ● one of two subjects proposed by the Faculty of Polish Language
Learning Goals	As announced for the respective course.
Methods of assessment & grading structure	As announced for the respective course.