

Course Name : History of Islamic Science and Philosophy							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
ISC 224	C	Spring	4.00	0.00	0.00	4.00	5.00
Lecturer	Ledian Cikalleshi, Msc						
Assistant							
Course language	Albanian, English, Turkish						
Course level	Bachelor						
Description	In this course will be treated the development of philosophy and science in Islamic geography in the VII-XV centuries, the role of Muslim scientists in laying the foundations of modern science, the most important representatives, their works and discoveries. The mediating role of Muslims in the transmission of ancient Greek science and philosophy to Europe. History of philosophical thought and philosophical currents throughout this time.						
Objectives	Learning the history of works that have been done in the history and civilization of Islam in relation to science and knowledge of scientists.						
Core Concepts	1. Name: Islamic or Arabic philosophy 2. Islamic philosophy and its relationship with other Islamic sciences 3. The period of translations and Bayt al-Hikmah 4. Representatives of Islamic philosophy in the East: Kindi and Farabi 5. Representatives of Islamic philosophy in the East: Ibn Sina 6. Imam Ghazali 7. Representatives of Islamic philosophy in the West: Ibn Bajja, Ibn Hazm, Ibn Tufayl 8. Representatives of Islamic philosophy in the West: Ibn Rushd and Ibn Khaldun 9. The Influence of Islamic Philosophy on the West 10. Development of Islamic science 11. The Contribution of Muslims to Science: Mathematics and Astronomy 12. The Contribution of Muslims to Science: Geography, Geology and Biology 13. The Contribution of Muslims to Science: Alchemy, Chemistry and Medicine 14. The influence of Islamic science and the reasons for its weakening						
Course Outline							
Week	Topic						
1	Definition: Islamic or Arabic philosophy Before embarking on this research and before exposing the problems that have guided this philosophy and trying to unravel it, we must more thoroughly analyze the question of the title of this study, its very naming 'Islamic' or 'Arabic philosophy ', because the distinction of these two definitions is in itself one of the characteristics of the object of this philosophy. This problem has been studied by classical historians as well as by contemporary historians during the nineteenth and early twentieth centuries, especially after the emergence of Arab nationalism and the awareness of Arabs of their being and identity. The thought of the classics is completely different from the thought of the contemporaries. From this study is understood the powerful diversity of the definition of philosophy sometimes as Islamic, sometimes as Arab, or philosophy in Islamic states or philosophy in the Islamic world, etc. We will ask some of these thoughts precisely because of their unusualness. Iranians, Hindus and Turks insist on defining this philosophy as Islamic. El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002:13-24						

2	Islamic philosophy and its relationship with other Islamic sciences The second issue that must be explained in its essence, too, before preoccupation with exposing the historical intersection of this philosophy is the distinction between philosophy and kalam; to determine whether it will be Islamic philosophy, if we want its claim, kalam to Muslims, or philosophy is a kalam something completely different from it, or kalam is a branch of philosophy. If the case of philosophy and kalam was such, and if their rift lasted until the sixth century, then the case is identical with philosophy and tasawwuf; even the rift between them is even more severe and the disagreements greater. They differ precisely in both object and method. In relation to science, every philosopher has known natural and philosophical knowledge. However, not every scientist is a philosopher, because he stands within the limits of a certain science, is specifically devoted to it, and studies nothing but it. El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002:24-37
3	The period of translations and Bayt al-Hikmah The Arabs in the first century AH were not preoccupied with the translation of philosophy because their care, as it has become clear to us, was focused only on the translation of science. The period of translations in the full sense of the word began in the time of the Abbasids. Abbasid Caliph Ja'far al-Mansuri founded Baghdad, which for a long time was fortunate to be the birthplace and heart of Islam. Caliph al-Mansuri then invited George Baht-Jeshuan of Jund Shapuri in 148 AH, appointed him superior to the physicians, and remained in that position until his death in 150 AH. Thus, the center of the cultural, philosophical and scientific movement has passed from Jundi Shapuri to Baghdad. Caliph al-Ma'mun in 215 AH established the Institute of Translation which is called the 'House of Wisdom'. Appointed translators and their collaborators, who have been excellent at mastering the Syrian and Greek languages with great care in Arabic. El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002:38-58
4	Representatives of Islamic philosophy in the East: Al-Kindi and Al-Farabi Al-Kindi studied sharia-legal knowledge and kalam and actively participated in the transmission and translation of inheritance, we think, of course, in philosophy. Because Al-Kindi knew all the knowledge and disciplines and that he was an Arab Muslim, in spite of those who dealt with that knowledge and translated it by the Syrian physicians, Al-Kindi is rightly known as the 'Arab philosopher'. 'and' Islamic philosophy '. His philosophy was unknown to us because his books were lost; barely twenty-some treatments have been found. Al-Kindi has laid the foundations of Islamic philosophy. After him appeared Abu Nasr Al-Farabi (259-339 h. / 870-950), who strengthened its foundations and strengthened its construction. The Arabs called him the Second Teacher, since Aristotle was the first Teacher. He is an Islamic philosopher although of Turkish descent. The most important works are: Ihsa 'ul-ulum (Classification of Knowledge), Al-Madinat' ul-fadileh (Ideal State) and Al-Musika al-Kabir (Great Music). El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002:59-72
5	Representatives of Islamic philosophy in the East: Ibn Sina Islamic philosophy reached its peak with Abu Ali Husayn Ibn Abdullah Ibn Sinan (370-428 AH / 870-950). He has written numerous works on philosophy. Has written for each of its branches. After him philosophy has not progressed in that sense as it has progressed with it. Most scholars have dealt with the explanation of his books, such as Ar-Razi and Tusi. At the same time, philosophy in the personality of Ibn Sina has become representative until its aim has been thwarted by the spears of those who have tried to blow it up, until it has been harmed. His works are otherwise voluminous. They include both philosophy and medicine. He wrote Ash-Shifa 'on philosophy and Al-Kanun on medicine. Ash-Shifa 'divided his work into four parts: logic, physics, mathematics and metaphysics. He summarized it in the work An-Najat, in the well-known treatise. El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002:72-79
6	Imam Ghazali Imam Al-Ghazali (Abu Hamid Al-Ghazali) was born in the town of Ghazal in the district of Tusi, in a suburb of present-day Mashhad, in the province of Khorasan in Iran, in the year 450 h./1058. Al-Ghazali is one of the scholars who wrote a lot, who wrote with high quality, who knew how to write, while even today his works are legible, even impassable for all fields of knowledge and for all ages of readers. He brilliantly struck the balance between spirituality and physics and regarded them as close and inseparable connections. Recently, Al-Ghazali is being rediscovered among both Muslims and non-Muslims, and is therefore one of the most widely read Muslim authors of all time. Tehafut'ul-felasifeh (Philosophy's Self-Destruction), laying out and attacking philosophical issues in twenty points. In this work Al-Ghazali severely criticized dogmatic philosophers, ruined their doctrine, but does not offer new doctrine in this regard. However, his philosophical and theological stance on the problems posed can be indirectly noticed. Corbin, Henri, Historia e Filozofisë Islame, Logos-A, Shkup, 1997:109-112

7	Representatives of Islamic philosophy in the West: Ibn Bajja, Ibn Hazm, Ibn Tufayl In this scientific atmosphere appeared the first Andalusian philosopher, Abu Bakr Muhammad Ibn Yahya Ibn Bajjah, known as Ibn Saig. He was born at the end of the fifth century, and died in the year 533 AH or in 1138 AD. r. The date and year of his birth are not known. Ibn Bajah was fundamentally versed in natural sciences, mathematics, astronomy, and music, and wrote commentaries on the works of Aristotle. Cordoba was also inhabited by one of the most important personalities of Andalusian Islam in the 10th and 11th centuries, a complex personality, whose multiple aspects are manifested in his work. There is Ibn Hazm poet, there is Ibn Hazm thinker, theologian, critical historian of religions and philosophical and theological schools; there is Ibn Hazmi moralist, there is also Ibn Hazmi jurist. Here we are most interested as Platonists and historians of religions. Abu Bakr Muhammad Abd al-Malik Ibn Muhammad Ibn Tufayl, from Cordoba, was born near Granada. The exact date of his birth is not known. The first thing he started to deal with was medicine. Through her he became famous and wrote for her many works that, unfortunately, have been lost. Of all his works only one treatise entitled Hajj Ibn Jakdhan (The Living Son of the Wise) remained. El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002:79-90; Corbin, Henri, Historia e Filozofisë Islame, Logos-A, Shkup 1997:135-137
8	Midterm Exam
9	Representatives of Islamic philosophy in the West: Ibn Bajja, Ibn Hazm, Ibn Tufayl In this scientific atmosphere appeared the first Andalusian philosopher, Abu Bakr Muhammad Ibn Yahya Ibn Bajjah, known as Ibn Saig. He was born at the end of the fifth century, and died in the year 533 AH or in 1138 AD. r. The date and year of his birth are not known. Ibn Bajah was fundamentally versed in natural sciences, mathematics, astronomy, and music, and wrote commentaries on the works of Aristotle. Cordoba was also inhabited by one of the most important personalities of Andalusian Islam in the 10th and 11th centuries, a complex personality, whose multiple aspects are manifested in his work. There is Ibn Hazm poet, there is Ibn Hazm thinker, theologian, critical historian of religions and philosophical and theological schools; there is Ibn Hazmi moralist, there is also Ibn Hazmi jurist. Here we are most interested as Platonists and historians of religions. Abu Bakr Muhammad Abd al-Malik Ibn Muhammad Ibn Tufayl, from Cordoba, was born near Granada. The exact date of his birth is not known. The first thing he started to deal with was medicine. Through her he became famous and wrote for her many works that, unfortunately, have been lost. Of all his works only one treatise entitled Hajj Ibn Jakdhan (The Living Son of the Wise) remained. El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002:90-96; Corbin, Henri, Historia e Filozofisë Islame, Logos-A, Shkup 1997:176-178
10	The Influence of Islamic Philosophy on the West The influence on Europe of Ibn Rushd, who himself was from Spain, was extremely profound, giving rise to a philosophical current called "Latin averroism", which was later banned by the Catholic Church. The translations carried out in this period stimulated the birth of new currents of thought in Europe and took philosophical and theological discussions to a new level. C. H. Haskins, who analyzes the influence of these translations, calls this period the "Renaissance of the twelfth century." The profound influence of the translations made in Andalusia on the Christian world of the Middle Ages, may also make it easier for us to understand a paradox that we briefly mentioned above. In important philosophical matters it was impossible to ignore the ideas of Muslim thinkers. Thoma d'Aquini, who put his stamp on the religious thought of the Middle Ages and can be called the "Ghazali of the West", in his work Summa Theologica, refers by name in more than two hundred places to Ibn Sinan and Ibn Rushd. Kalin, Ibrahim, Islami dhe Perëndimi, Logos-A, Shkup, 2011:55-58, 95-101
11	Development of Islamic science Islamic science, that is, the science developed by Muslims from the second century of Islam onwards, is certainly one of the great achievements of Islamic civilization. Without it, not only would there have been no medieval, Renaissance, or later Western science, but neither would one of the most important studies of nature related to the religious universe that the Islamic sciences represent would have ever been achieved. For about seven hundred years, from the second to the ninth century, Islamic civilization was perhaps the most productive of all civilizations in the field of science, and Islamic science was at the forefront of activity in many fields, from medicine to astronomy. Gradually, since the ninth century, activity in the Islamic sciences diminished, but by no means ceased. Also, in the Ottoman world there was an animating interaction with certain elements of Western science, in the XI and XII centuries AH, before the penetration of modern science in the Islamic world about two hundred years ago. Nasr, Sejjid Husein, Udhërrëfyes i të riut mysliman në botën moderne, Zemra e Traditës, Tiranë, 2007:121-124; Sarton, Xhorxh, Historia e Shkencës Islame, ACFOS, Tiranë, 2009:17-23

12	The Contribution of Muslims to Science: Mathematics and Astronomy Muslims withdrew from the study of mathematics from the beginning largely because of the "abstract" nature of Islamic proclamation and the love that Islam created in the minds of its followers for the doctrine of unity and for a vision of the mathematically understood universe. In the traditional sense of the term mathematics. This is why Muslims made tremendous contributions in many areas of mathematics. Not only because of the great impetus given to the attainment of knowledge in Islam, but also because of the specific role that astronomy plays in Islamic religious rites, such as finding the direction of the qibla and times of prayer, Muslims were from the very beginning very interested in observation of the heavens and study of astronomy. Here, too, Islamic astronomy gathered the traditions of the Babylonians, Greeks, Persians, Indians, and ancient Arabs and created a new synthesis that managed to place astronomy on a broader foundation than ever before. Islamic astronomy was interested both in observation and observatory, in the invention of instruments, and in mathematical astronomy. Nasr, Sejjid Husein, Udhërrëfyes i të riut mysliman në botën moderne, Zemra e Traditës, Tiranë 2007:121-124; Sarton, Xhorxh, Historia e Shkencës Islame, ACFOS, Tiranë, 2009:24-28
13	The Contribution of Muslims to Science: Geography, Geology and Biology Muslims knew many of the classic works of geography from the Greeks, and the Greek word geographia (juhugrafije) was known to Muslims and appears in Arabic, Persian, and other Islamic languages, although the term surat al-ard gradually became more widely used. Muslim geographers began writing about geography from the third century of Islam, and figures such as Ibn ul-Hawqali and al-Biruni wrote major works of geography, culminating in Idrizi's work and the magnificent maps he drew in the seventh century. Islam, in the Sicilian court of Frederick the Great. The Muslims divided the natural world into three well-known kingdoms, consisting of minerals, plants, and animals, and studied them carefully. The study of minerals and metals was often combined with the study of alchemy but not necessarily and occasionally with the study of medicine, thanks to the medical use made of various minerals. As for plants, on the one hand they were studied again in the light of their medicinal properties and on the other hand in the light of their agricultural importance. Nasr, Sejjid Husein, Udhërrëfyes i të riut mysliman në botën moderne, Zemra e Traditës, Tiranë 2007:124-130; Sarton, Xhorxh, Historia e Shkencës Islame, ACFOS, Tiranë, 2009:28-33
14	Muslim Contribution to Science: Alchemy, Chemistry and Medicine Alchemy was not just a precursor to chemistry. The first great Islamic alchemist lived very early in the history of Islam and this mastery culminated with him. This figure, whose name was identified with alchemy, was Jabir ibn Hajyan, who lived in the second century of Islam. One of the most elaborate fields of activity in the Islamic sciences which has gained the attention of many Muslim scholars over the centuries and still remains alive is Islamic medicine. The foundation of Islamic medicine is what is called et-tibb en-nebevri (prophetic medicine), ie the sayings, habits and actions of the Prophet (s.a.v) on health, hygiene, care of the body and of course the relationship of the soul with the body. The works of Ibn Sina are in a sense the crowning achievement of early Islamic medicine. As mentioned earlier, in the West he was called the "Prince of Physicians" and his Canon is arguably the most famous of all medical books, including the works of Hippocrates and Galen. Nasr, Sejjid Husein, Udhërrëfyes i të riut mysliman në botën moderne, Zemra e Traditës, Tiranë 2007:130-138; Sarton, Xhorxh, Historia e Shkencës Islame, ACFOS, Tiranë, 2009:34-46, 95-102
15	The influence of Islamic science and the reasons for its weakening Without Islamic sciences, the progress of science development in these three civilizations would have been very different. This is especially true of the West, which is of course of central interest, due to the development of modern science in the West and its subsequent impact on the entire globe. Between the XI and XIII centuries e.s. many of the major works of Islamic science were translated into Latin mainly in Spain but also in Sicily, and occasionally elsewhere in Italy and some of the Muslim scholars like Ibn Sina and Raziu became everyday names in the western world. Islamic medicine became the foundation of European medicine to the extent that when such an iconoclastic figure as Paracelsus wanted to rebel against traditional medical practices and establish a new medical science, he burned the Ibn Sina Canon in Basel as a symbol of traditional medicine. . Of course, the tradition of Islamic science gradually weakened but it did not fall as fast as some in the West have claimed. It continued in the X, XI and XII centuries of Islam especially in the field of medicine and pharmacology. If one is to speak of the decline of the Islamic sciences, one must speak only of the last two or three centuries, if one examines the whole Islamic world. Nasr, Sejjid Husein, Udhërrëfyes i të riut mysliman në botën moderne, Zemra e Traditës, Tiranë 2007:138-141
16	Final Exam

Prerequisites	The student must attend the course at a minimum rate of 75%.		
Literature	• El-Ehwani, Ahmed Fuad, Filozofia Islame, Zëri Islam, Prizren, 2002 • Nasr, Sejjid Husein, Udhërrëfyes i të riut mysliman në botën moderne, Zemra e Traditës, Tiranë 2007 • Sarton, Xhorxh, Historia e Shkencës Islame, ACFOS, Tiranë, 2009		
References	• Corbin, Henri, Historia e Filozofisë Islame, Logos-A, Shkup 1997 • Kalin, Ibrahim, Islami dhe Perëndimi, Logos-A, Shkup, 2011		
Course Outcome			
1	The student must know the important Muslim scientists and philosophers.		
2	The studen should have learned the development of the history of science in Islamic geography.		
3	The student should be able to recognize Islamic civilization and its impact on the European Renaissance.		
Course Evaluation			
In-term Studies		Quantity	Percentage
Midterms		1	40
Quizzes		0	0
Projects		0	0
Term Projects		0	0
Laboratory		0	0
Class Participation		0	0
Total in-term evaluation percent			40
Final exam percent			60
Total			100
ECTS Workload (Based on Student Workload)			
Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	4	56
Duties	0	0	0
Midterms	1	2	2
Final Exam	1	2	2
Other	0	0	0
Total Work Load			124
Total Work Load / 25 (hours)			4.96
ECTS			5.00