In this course, we’ll explore: the sources for science in Islam; development and transformation of scientific ideas; interaction of science and religion; transmission to other cultural traditions; and the significance of Islamic science for engaging with larger questions such as rationality within Islamic societies and religion.

Assignments:

1) [5% of grade] Coming to class each week, keeping up with the readings, and being prepared to discuss them.

2) [15% of grade] Both enrolled students and auditors will be asked to present several reports during the term based on the assigned or additional readings related to that week’s topic.

3) [30% of grade] 2 short papers (Due: Sept. 24 and Nov. 12)

4) [15% of grade] Presentation on a particular subject in Islamic science (may be related to the term paper) (Due: Oct. 1)

5) [35% of grade] Term paper (approximately 10-15 double-spaced pages) on some aspect of science in Islam. The paper may be either historiographical or historical; in the latter case, you could focus on a specific author or text, or else trace an idea, discourse, or interaction over time. You will be expected to use primary source materials, either in the original language or in translation. (Due: Dec. 10, 2019)

Readings will be available at myCourses, as an e-book or e-article, or as printed media in the Islamic Studies Library.
SOME QUESTIONS WE WILL FOCUS ON:

1) Why would a religiously-based society embrace (or seem to embrace) non-religious knowledge, in particular knowledge that was from the “outside” and that in some cases contradicted its ostensible doctrines?

2) To what extent can we say that Islamic science is Islamic and in what sense is it universal?

3) How did the tensions related to authority (religious, political, intellectual, etc.) play out?

4) What was the nature of the hostility to “ancient” science in Islam? To what extent did it play a role in the development or hindrance of that science?

5) How did Islamic science disseminate, both geographically and generationally?

6) To what extent did Islamic science influence the development of “modern” science?

7) Why are contemporary Islamic societies and countries finding it difficult to sustain a scientific infrastructure?
SCHEDULE

Sept. 3: Setting the Stage
a) Introduction to the course
b) In Class reading: Jamil Ragep, “When did Islamic science die (and who cares)?”
islamsci.mcgill.ca/Viewpoint_ragep.pdf
c) Islamic Science on the Web

Sept. 10: Introduction to Science in Islam

Sept. 17: The Translation Movement
https://archive.org/details/DimitriGutasGreekThoughtArabicCultureTheGraecoArabicTranslationMovementInBaghdad/page/n2

STUDENTS TURN IN TOPICS FOR OCT. 1 PRESENTATION

Sept. 24: The Translation Movement (cont’d)
https://archive.org/details/GeorgeSalibaIslamicScienceAndTheMakingOfTheEuropeanRenaissanceTransformationsStu/page/n1

PAPER: THE TRANSLATION MOVEMENT

Oct. 1: Transformation: Is there anything original in Islamic science?
http://digitool.library.mcgill.ca/webclient/DeliveryManager?pid=108819&custom_att_2=direct

STUDENT PRESENTATIONS

Oct 8: Theories Regarding the Place of Science in Islam—Marginality vs. Naturalization [or how did scientific traditions persist for over a millennium?]
Oct. 15: The Place of Science in Islam—Institutions and Teaching

Oct. 22: The Foundations of Islamic Science: Philosophy, Kalām, and Mathematical Humanism
(a) Philosophical Underpinnings

Oct. 29: The Foundations of Islamic Science: Philosophy, Kalām, and Mathematical Humanism
(b) Kalām and Science

Additional Reading:

Nov. 5: Science vs. Religion?

http://www.muslimphilosophy.com/ir/tt/


[Ibn Khaldūn on astrology, alchemy and philosophy]

Nov. 12: Science vs. Religion?


PAPER: REVIEW OF GUTAS’S ARTICLE

Background: Frank Griffel, *Al-Ghazālī’s Philosophical Theology* (Oxford, 2009) [esp. chs. 3-7]. See also: https://plato.stanford.edu/entries/al-ghazali/

Nov. 19: Transmission to Other Cultures


https://doi.org/10.1017/CBO9781139088329.011


https://muse.jhu.edu/book/31129


http://digitool.library.mcgill.ca/webclient/DeliveryManager?pid=108813&custom_att_2=direct

Nov. 26: Science and Islam: The Modern Context


Ahmad Dallal, *Islam, Science, and the Challenge of History*, ch. 4 (pp. 149-76)


[mC] Ehab Abouheif, “On Bridging Islam and Evolution through the Secret World of Ants: Struggles of a Muslim Evolutionary Biologist.”

Pervez Amirali Hoodbhoy: "Islam and Science Have Parted Ways”

https://www.meforum.org/2593/pervez-amirali-hoodbhoy-islam-science

Dr. Ahmad Shafaat, “A review of Pervez Hoodbhoy, *Islam and Science: Religious Orthodoxy and Battle for Rationality*”

https://mm-gold.azureedge.net/Articles/hoodbhoy/book_review_islam_science.html

OUTLINE OF TERM PAPER DUE ALONG WITH SHORT PRESENTATION

DECEMBER 10, 2019: TERM PAPER DUE
**Additional Course Information**

1. Ragep’s Office Hrs: M 14:00 – 16:00 and by appointment. [Morrice Hall 024]

2. Late submission of assignments will be permitted without penalty only in cases of serious illness or emergency (such as a death in the family); approval for late submissions must be obtained in advance in all but highly exceptional cases.

3. Otherwise, late submissions of assignments will be accepted but will be penalized a half letter-grade (or 5 points on a 100 scale) for every day they are late, up to a maximum of 50% penalty. This includes the term paper.

4. McGill is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. It would be helpful if you contact the Office for Students with Disabilities at 398-6009 (online at [http://www.mcgill.ca/osd](http://www.mcgill.ca/osd)) before you do this.

5. In accord with McGill University’s Charter of Students’ Rights, students in this course have the right to submit in English or in French any written work that is to be graded. Conformément à la Charte des droits de l’étudiant de l’Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté.

6. McGill University recognizes and respects the diversity of its members, including diversity of religious faiths and observances. For McGill’s policy for the Accommodation of Religious Holy Days, please see [https://www.mcgill.ca/importantdates/holy-days-0/policy-holy-days](https://www.mcgill.ca/importantdates/holy-days-0/policy-holy-days)

7. Permission from the instructor is needed for taping of Lectures.

8. Academic Integrity:

   McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/)) for more information.

9. In the event of extraordinary circumstances beyond the University’s control, the content and/or evaluation scheme in this course is subject to change.

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Please feel free to email me with any questions or problems: jamil.ragep@mcgill.ca

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