

ORIGINS 3S03 Origins Seminar 2

Time Period

Term 3, 2007-2008

Instructor

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Objectives

This course provides for students advanced practice with the concepts, literature, and research skills relevant to origins themes. Members in or visitors to the Origins Institute will present research for discussion.

Topics

Course content will cover the 6 Origins Institute themes:

space-time

elements

structure in the cosmos

life

species and biodiversity

humanity.

Resources

A URI will be established for a course Internet site. All official course communication must be conducted via this resource.

Sessions

Sessions will be transpire on Mondays between 1530 and 1620 in MDCL 1116. Sessions will be preceded by Origins Institute Colloquia, which transpire between 1430 and 1530 in MDCL 1110 and involve origins-theme-relevant material.

Prior to each session, a student or group (depending on enrolment) 'inquisitor' will prepare a quiz about a reading (that will have been chosen by the inquisitor), which will appear at the course Internet site. The quiz should be prepared and provided to the course instructor for posting to the course Internet site by a date that will provide sufficient time for the other student 'defendants' to respond. The inquisitor(s) will be assessed on the basis of how provocative the quiz is; defendants will be assessed electronically on their responses to the quiz, which must be submitted prior to the session to earn credit. Defendants also will prepare for submission (in

electronic and hardcopy format) a document about the reading. The document should be accessible to a 'transdisciplinary' scientific audience, written and formatted like a letter for the journal *Nature* (a link to the template that is provided for submitting letters to that journal is provided at the course Internet site). After reading the document, a scientist who previously possessed scant knowledge about the origins-theme should possess sufficient familiarity with it to appreciate the fundamental questions about that topic for which scientists seek answers.

During each session, a student or group (depending on enrolment) 'host' will introduce the 'guest' Origins Institute member or visitor (e.g., providing biographical information, academic history, and research interest details – this should be obtained via a brief interview with the guest); deliver a synopsis about the reading; engage the guest and other students in reviewing the quiz; and then be responsible for guiding (*i.e.*, initiating, maintaining, and moderating) a discussion – including being prepared to pose provocative questions to the guest and nonhosts. Hosts will be assessed on how effectively they achieve these tasks and are encouraged to be as creative as they can.

After each session, a student or group (depending on enrolment) 'reviewer' will assess the documents that were prepared by other student 'authors' (*i.e.*, read them critically, providing constructive comments concerning spelling, grammar, information, interpretation, and literature coverage). Documents must be submitted to reviewer(s) in electronic and hardcopy formats before the session terminates. By the next session, reviews and assessments must be returned to authors by the next session; and the most- and least-impressive documents should be forwarded in electronic format to the course instructor.

Evaluation

A 0-100 scale will be implemented for grading. The final score will be calculated as a sum over

Host	10
(for one session; mean over participation for all others)	
Inquisitor	20
(for one session; mean over quizzes for all others)	
Final Examination	30
(electronic)	
Report & Review	40
(reviewing for one session; mean over reports for all others).	

Comprehension, effective communication, originality, and creativity will be assessed for credit in all components.

Participation will be assessed weekly as 0, 0.5, or 1, depending on interaction during the session.

Group, problem-based learning is encouraged with participation and quizzes.

The yellow card system* is in effect for all weekly assignments; a late penalty rate = 5% per day for which the university is open is in effect for all other assignments (they may, of course, be submitted any time prior to prescribed deadlines).

***Yellow Card System**

The yellow card system is implemented to recognise that sometimes circumstances conspire beyond predictable control (e.g., a pregnant dog goes into labour the night before an assignment is due) ... 'stuff happens!' Yellow cards allow students to miss one assignment without penalty (or vouching from a professional) and teaching assistants to be efficient (*i.e.*, ruthless) in processing assignments.

Each student will be allotted virtually one yellow card at course initiation. If a student is unable to submit an assignment by a prescribed deadline, then the course instructor will revoke that yellow card and the student will receive a null mark for that assignment. The course instructor will redeem yellow cards for students who retain them throughout the term and replace the lowest-assignment mark for that student with a perfect score. Yellow cards are non-transferable.

Academic Integrity

Please visit the URI

http://www.mcmaster.ca/academicintegrity/instructors/proc_forms/AD_CourseOutlines.pdf

for details about the academic integrity policy for McMaster University.