## Course expectations and grading criteria: FSEM 1111 24 "Mars: Another Cradle of Life or Dead Planet?"

**Reading assignments** – should read not later than the day prior to the class day. There may be a pop quiz at the beginning of class on the assigned reading (including prior assigned reading).

Writing assignments – we will have a few short writing assignments through the quarter (1-2 pages) that will normally be due the next class period. Late submissions will not be tolerated and will be penalized 33% per day including weekends. Emphasis will be placed equally on content, spelling, grammar and format. The final exam will be a 5-10 page group project term paper where the group will do the research together, but each member must write their own original paper.

**Attendance** - is <u>mandatory</u> (including assigned outside lectures/activities). Your final grade will be reduced down a grade for every two missed classes (ie., A to A<sup>-</sup>, etc.) Excused absences are rarely granted and must be approved in advance (except for documented health or family emergencies). Students arriving more than 5 minutes late will be considered absent for the day.

**Group presentations** – a major part of the 'seminar' nature of the course will be cooperative learning group presentations. Group presentations will be graded on the basis of understanding the material, content, and convincing arguments. While the evaluation will be based on how well the group performed, we will also include two peer evaluations during the quarter. Your attendance and participation with your group is essential.

Outside lectures/cultural events – you are encouraged to take advantage of all that a university environment like DU has to offer. We will have several lectures/events on the syllabus, some of which are mandatory and some optional events that you can choose. The only exception is an academic conflict, in which case you should have an alternative approved. For the optional events, you will be required to write a short 1-2 page paper describing the event, attach the program, what happened (discussion, music), and equally important – your reaction to it (ie., how you liked/disliked it and why, whether it was a new experience that you might never had attended otherwise, etc.) You can submit up to two additional lectures/cultural events papers for up to 50% extra credit each

You will be required to attend:

- 1. One "Bridges to the Future" lecture -short paper required
- 2. Two music concerts (submit the program) -can include one jazz concert
- 3. Chancellor's dinner no short paper required

Total number of required 1-2 page papers = 4-6

## **Grading:**

9	
Short papers (4-6 total)	15%
Group presentations	15%
Peer evaluations	5%
Pop quizzes (worksheets)	10%
Final paper/presentation	30%
Midterm and final exams	25%
TOTAL	100%

T, Sept 11	Course objectives, expectations, reading/writing assignments, grading; Movie – "War
1, 000111	of the Worlds" (1953) – write a short paper describing the movie, and what you think
	it has to do with the course.
Th, Sept 13	Assignment: power point presentation – 5 groups of 2 (and one of 3), subjects will be
Till, Gept 13	events in the history of Mars science up to the Mariner 4 mission in 1965.
	Dr. B's Presentation Recipe "Mars Basics" (or "How to Make a Power Point
	Presentation"), also group work on presentations. Class to use <u>www.nasa.gov</u> and
	www.reference.com as chief sources of information.
T, Sept 18	read MWWP Chapter 1 this week, guest speaker in Dr. B's absence, Melissa
NOT HERE	Martinez, "Academics 101: Understanding the University of Denver's Academic
	Tools & Resources",
Th, Sept 20	Guest speaker in Dr. B's absence, Kerry McCaig, "Tricks of the Trade: Smart Tricks
NOT HERE	to Enhance Learning" Melissa Martinez, "Academics 101: Understanding the
	University of Denver's Academic Tools & Resources", Personal position paper.
	Evaluate the statement "The more I know about the Universe, the more I know about
	myself". 2 pages, double-spaced, 12 pt font. Due next class.
T, Sept 25	Mars history presentations, Discussion of the content and process of presentations
,	
Th, Sept 27	Finish presentations; beginning of Mariner and Viking histories (Dr. B's presentation)
	Viking mission – assign presentations from Martin Marietta pamphlet, one each on
	atmosphere and weather, biology, organics, floods and mineralogy, to be
	supplemented with internet and library research
T, Oct 2	Work on presentations in class: tour of Coors Recreation Center
Th. Oct 4	Viking presentations, evaluations of presentation, summary of Viking results
T, Oct 9	Mid-term exam on previous work, Lowell to Viking, review of question "if life were
	discovered on another planet tomorrow, how would your life be different", if we have
	time (read pp MWWP 407-417 for next time)
Th. Oct 11	Discussion of gap between Viking mission (1975) and Pathfinder and Global
	Surveyor missions (1996) – ALH84001 meteorite and declarations of life on Mars
	(also 1996), guest speaker
T, Oct 16	Extremophilic bacteria and Bombardier beetles: were the Viking conclusions
104 0 4 47	wrong?? How do we find what we don't know we're looking for?
W, Oct 17	Chancellor's First-Year Dinner – all must RSVP and advise about dietary needs.
Th. Oct 18	Comparison of geological timelines for Earth and Mars
T, Oct 23;	Recent and Current Mars Missions presentations assigned – Mars Global Surveyor,
	Pathfinder, Spirit and Opportunity, ESA's Mars Express, Failed missions - Term
	presentation/paper planning – all groups should have scheduled informal, short
Th. Oct 25	meetings with AJRB to define initial topic.  Movie "Mars: Dead or Alive" (NOVA) – discussion of multidisciplinary aspects of
Th. Oct 25	space missions, Movie "Welcome to Mars" (NOVA) – discussion of current science
*	findings with emphasis on recently observed suggestions of surface water
	Term presentation/paper planning – all groups should have scheduled informal,
	short meetings with AJRB for more topic help and advice
T, Oct 30	Current missions presentations, including future missions (Dr. B)
Th. Nov 1	Internships and the Career Center at DU, John Hagg; term paper planning
	discussions
T, Nov 6	Goofy Mars – the Face and Cydonia; final term paper planning discussions
Th. Nov 8	Volunteer early term paper presentations; Applications of what we've learned to
	another system – Our Mission(s) to Europa
T, Nov 13.	Term paper presentations: Group 1; Group 2; Group 3; Group 4; Group 5
Th Nov 15	last day of classes –continuation of term paper presentations; loose ends
F. Nov. 17	Term paper deadline: 5PM Olin 204 (late submissions not advised; study for Final
	Exams!)
L	