

AAE451 Schedule: Fall 2009

Version 1.0 - 8/28/08

Week	Tu (9:00AM)	(PDRs)	Th (1:30PM)	(QDRs)
1	8/25/09	First class. Receive Mission Specification.	8/27/09	Discuss schedule and deliverables.
2	9/1/09	Individual Mission Evaluation due. Form Teams.	9/3/09	Individual System Concept(s) due (individual concept sketches and description). Team Design Requirements & Objectives due.
3	9/8/09	Candidate Team Concepts defined.	9/10/09	Team Concept Selection Document and Presentation due.

Begin weekly Preliminary Design Reviews (PDR) on Tuesday AM (4 presentations, 20 minutes long) and Quick Design Reviews (QDRs) on Thursday PM (4 presentations, 8 minutes long). Tuesday afternoons will be for presentation of supplementary materials by Professor Andrisani or for and team discussions.

4	9/15/09	Flight Control System Written Status Report Due. Vehicle Sizing PDR (4 presentations, 20 minutes long)	9/17/09	Project Plan Review (4 presentations, 8 minutes long).
5	9/22/09	Propulsion 1 PDR. Stealth QDR (Tuesday 1:30PM, 4 presentations, 8 minutes long)	9/24/09	Structures and Weights 1 QDR.
6	9/29/09	Aerodynamics 1 PDR. Individual Trade Study #1 due.	10/1/09	Dynamics and Control 1 QDR (Flight Control, need doc)
7	10/6/09	Structures and Weight 2 PDR.	10/8/09	Propulsion 2 QDR.
8	10/13/09	October Break: No class.	10/15/09	Aerodynamics 2 QDR, Individual Trade Study #2 due. Draft of Propulsion Chapter of final report due.
9	10/20/09	Dynamics and Control 2 PDR. Parts Acquisition List due. Parts ordered (4:00 PM). Draft of Aerodynamics Chapter of final report due.	10/22/09	Prototype Fabrication, Economic, & Test Plan QDR. Draft of Structures and Weights Chapter of final report due.
10	10/27/09	Critical Design Review (CDR), (formal oral presentation, 50 minutes including question and answer period, 3 presentations in AM, 1 in PM), design frozen, no aircraft construction prior to this date, 21 days to construct flying prototype.	10/29/09	Draft of Dynamics and Control Chapter of final report due. Peer Evaluation #1 due.

Build Phase (3 weeks then flight test on Tuesday before Thanksgiving)

11 (B1)	11/3/09	Thiokol Final Design Report due. Build in ARMS 2098.	11/5/09	Build in ARMS 2098.
12 (B2)	11/10/09	Build in ARMS 2098.	11/12/09	Build in ARMS 2098.
13 (B3)	11/17/09	Build in ARMS 2098.	11/19/09	Flight Readiness Review (completed aircraft checked for flight safety and flight worthiness by pilot) ARMS 2098.
14	11/24/09	>>>> In-door flight tests at Purdue Armory, First official flights. Attendance mandatory. <<<<< (Open to the public).	11/26/09	Thanksgiving: No Class.

Post flight finishing up

15	12/1/09	Meet at 1:30 PM. Plan for next two weeks.	12/3/09	No meeting.
16	12/8/09	DEAD WEEK: Lessons Learned and Vehicle Summary Presentation (informal presentation, 20 minutes followed by a 10 minute question and answer period). Four presentations should be completed in the morning session.	12/10/09	DEAD WEEK: Final Report Addendum: Lessons Learned and Vehicle Summary due. Aircraft and equipment secured. Peer Evaluation #2 due. COURSE ENDS. (no final exam)