H.G. Heinrich Parachute Systems Short Course – 2016 Edition – FINAL

	Monday	Tuesday	Wednesday	Thursday (Design problem due today)	Friday
8-9	Welcome; Para-literature; Definitions **Potvin**	Flight Mechanics **Cruz**	Materials & Stress/load analysis **Wolf**	Supersonic Parachutes **Underwood**	Case Study - LRALT **Wolf**
9-10	Design Considerations **Wolf**	Aerodynamics I **Underwood**	Gliding parachute design **Underwood**	Aerodynamic Models for Parachute Dynamics **Wolf**	Design problem wrap up & debrief **Cruz**
10-11	Break + Deployment **Wolf**	Break + Impact & Shock Attenuation **Wolf**	Break+ Gliding Chute Applications **Underwood**	Break+ Parachutes for space exploration **Underwood**	Break+ Introduction to FSI **Underwood**
11-12	Inflation I: Phenomenology & reefing **Potvin**	Aerodynamics II **Underwood**	Testing Measurements & Analysis 2 **Watkins**	Testing Measurements & Analysis 3 **Watkins**	Course Evaluation, Intro to ADS TC & Farewell
12-13:30	lunch	lunch	lunch	lunch	lunch
13:30-14:30	Testing overview **Wolf**	Inflation II: Estimators; Scaling; Modeling **Potvin**	Parachute Opening Shock **Wolf**	Inflatable Aerodynamic Decelerators **Cruz**	
14:30-15:30	Break+ Presentation of design problem **Cruz** How to approach design **Cruz and TBD**	Break + Design Problem Lab (Q&A with Instructors; small group discussions)	Break + Design Problem Lab (Q&A with Instructors; small group discussions)	Break+ Case Study – ARES Parachutes **Wolf**	
15:30-16:30	Deployment & packing demo **Watkins Potvin**	Testing Measurements & Analysis 1 **Watkins**	Wind tunnel testing **Cruz**	Testing Measurements & Analysis 4 **Watkins**	
18:00	*Ice-breaker* dinner @ Abbey restaurant				