Course Specifications

Program(s) on which this course is given:	Aerospace Engineering
Department offering the program:	Aerospace Engineering Department
Department offering the course:	Aerospace Engineering Department
Academic Level:	First Year Undergraduate
Date	November, 2014
Semester (based on final exam timing)	■ Fall ☐ Spring

A- Basic Information

1. Title:	Introduction to Aeronautics			**Code:**	AER101A			
2. Units/Credit hours per week:	Lectures	2	Tutorial	1	Practical	--	Total	3

B- Professional Information

1. Course description:	Introducing the student to various disciplines of aeronautics together with terminology and problems outlines
2. Intended Learning Outcomes of Course (ILOs):	**a) Knowledge and Understanding**
	The student should know history of flight
	The student should know atmosphere and basic aerodynamics
	b) Intellectual Skills
	The student should know how to use units and elementary problems
	The student should know conservation principles
	c) Professional and Practical Skills
	The student should be able to identify discipline
	The student should be able to write report
	The student should know computer programming
	d) General and Transferable Skills

3. Contents

Topic	Total hours	Lectures hours	Tutorial/ Practical hours
History of flights	8	4	2
Fundamental thoughts	6	3	2
The standard atmosphere	4	2	4
Basic aerodynamics	10	9	6
Revision	2	1	2

4. Teaching and Learning Methods	Lectures (√)	Practical Training/ Laboratory ( )	Seminar/Workshop ( )
	Class Activity (√)	Case Study ( )	Projects ( )
	E-learning ( )	Assignments /Homework (√)	Other:

5. Student Assessment Methods	
• **Assessment Schedule**	**Week**
-Assessment 1; Class test	5,10,15
-Assessment 2; Project Assignment	
-Assessment 3; Presentations	
-Assessment 3; Midterm Exam	8
-Assessment 4; Final Exam	End of the term
• **Weighting of Assessments**	
-Mid-Term Examination	15 %
-Final-term Examination	75 %
-Project	
-Class Test	10 %
-Presentation	
-Total	100 %
6. List of References	
Course Notes	
Blackboard notes + various course handouts	
Essential Textbooks	
Anderson, J.D., “Introduction to Flight”, 4th Edition, McGraw Hill, 2000	
Recommended Books	
Shevell, R.S., “Fundamentals of Flight”, 2nd Edition, Prentice Hall, 1989	
7. Facilities Required for Teaching and Learning	
Library references	
Xerox machine for student handouts	
Course Coordinator:	**Prof. Dr. Galal B. Salem**
Head of Department:	**Dr. Ayman Hamdy Kasem**