



Course Specifications

Program(s) on which this course is given:	B.Sc. in Aerospace Engineering
Department offering the program:	Aerospace Department
Department offering the course:	Aerospace Department
Academic Level:	4 th year (5 th Year in a five-year program)
Date	November, 2007.
Semester (based on final exam timing)	<input type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring

A- Basic Information

1. Title:	Aircraft Systems and Instrumentations			Code:	AER482			
2. Units/Credit hours per week:	Lectures	3	Tutorial	1	Practical		Total	4

B- Professional Information

1. Course description:	The course aims at teaching the student the basic concepts of Aircraft Systems and Instrumentation.
2. Intended Learning Outcomes of Course (ILOs):	a) Knowledge and Understanding Navigational Systems, Integrated Navigation System, Approach and Landing Systems, Measuring Instruments: Pressure, Temperature, Airspeed, Altitude. Control Systems and Instruments of Control Surfaces, Fuel Control System, Hydraulic Control System, Electric Power System, Safety Systems: Approach Warning, Wind-Shear Warning.
	b) Intellectual Skills The ability to analyze aircraft systems and instruments.
	c) Professional and Practical Skills The ability to identify aircraft systems and instruments and their role in aircraft.
	d) General and Transferable Skills Computing, analyzing results

3. Contents

Topic	Total hours	Lectures hours	Tutorial/ Practical hours
Navigation Systems	10	7	3
Interfacing	12	9	3
Hydraulic and Pneumatic Systems	15	12	3
Aircraft Systems	18	14	4
Maintenance	5	3	2
Total	60	45	15

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		Every Week	
-Assessment 2; Project Assignment		6 th Week	
-Assessment 3; Presentations		_____	
-Assessment 3; Midterm Exam		8 th Week	
-Assessment 4; Final Exam		End of The Semester	
• Weighting of Assessments			
-Mid-Term Examination		10 %	
-Final-term Examination		70 %	
-Project		10 %	
-Class Test		10 %	
-Presentation		_____	
-Total		100 %	
6. List of References			
Course Notes by The Lecturer			
7. Facilities Required for Teaching and Learning			
Lecture rooms, Projector, Computers and Internet Connection			
Course Coordinator:	Prof. Mohamed Sayed Bayoumi		
Head of Department:	Prof. Ayman Kassem		