

AEROSPACE TESTS AND MEASUREMENTS ETIC 1852	
Class Begins: - Classes End:	
Final Exam	
Class time:	9:00 AM-1: 40PM
Classroom:	Building 60505
Instructor:	
Contact Information	
Office:	Cocoa, 14-132
Office Hours:	NA
Advisement:	Upon appointment
E-Mail	

Textbook:	The Quality Technician's Handbook, 5 th Edition Gary K. Griffith	
Course Content:		
1.	This course covers a variety of the basic skills that contribute to ongoing quality at the technician level. The textbook provides an introduction to quality, and examines total quality management, quality costs and audits, inspection systems and planning, reading engineering drawings, geometric dimensioning and tolerance, graphical inspection analysis, common measuring tools and measurements, plate inspection methods, special measuring equipment and techniques, lot-by-lot acceptance sampling plans, statistical process control and shop mathematics. In addition to this there is a strong emphasis on NonDestructive Testing, how to identify the various NDE techniques with a familiarization of the most common techniques.	
Lab Projects:	Lab projects will correspond with applicable course materials.	
Grading Procedure:	The course grade will be a combination of the following components	
Classroom Performance (Participation, Attentiveness, Professionalism, Teamwork)		10 pts
Quizzes		10 pts
Mid-Term (Two Examinations, Weighted equally. One written, one practical)		30 pts
Practical Exams		20 pts
Final Exam (Two Examinations, Weighted equally. One written, one practical)		<u>30 pts</u>
Total		100 pts

01/14/2009	<p>Introduction to NDE 1: Overview, Terminology, Basic material processing Introduction to NDE 2: Continued Overview, Terminology, Basic material processing Visual Inspection Lecture</p>
01/21/2009	<p>NDT/Visual Inspection Lecture NDT/Borescope Familiarization NDT/Borescope Hands-on exercise Ch 1. Introduction to Quality Ch 1. Homework review. Prep for Quiz 1</p>
01/28/2009	<p>Quiz 1 Ch 2. Total Quality Management Lecture Ch 2. Homework review. NDT/Magnetic Particle Testing Lecture NDT/Magnetic Particle Testing Familiarization</p>
02/04/2009	<p>Review Quiz 1 NDT/Magnetic Particle Testing Exercise Ch 3. Quality Costs. Ch 3. Homework review. Prep for Quiz 2</p>
02/11/2009	<p>Quiz 2 Ch 4. Quality Audits. Ch 4. Homework review. NDT/Dye Penetrant Lecture NDT/Dye Penetrant Familiarization NDT/Dye Penetrant Exercise</p>
02/18/2009	<p>Review Quiz 2 NDT/Dye Penetrant Exercise Continued Ch 5 Inspection Systems and Planning. Ch 5. Homework review. Prep for Mid term</p>
02/25/2009	<p>Mid Term Ch 6. Reading Engineering Drawings. Ch 6. Homework review. Engineering Drawings Familiarization Engineering Drawings Exercise</p>

03/04/2009	<p>Review Mid Term Ch 7. Geometric Dimensioning and Tolerance. Ch 7. Homework review. NDT/Leak Detection Lecture Prep for Quiz 3</p>
03/11/2009	<p>Quiz 3 Ch 8. Graphical Inspection Analysis. Ch 8. Homework review.</p>
03/18/2009	<p>Review Quiz 3 Ch 9. Common Measuring Tools and Measurements. Ch 9. Homework review. Common Measuring Tools and Measurements familiarization Common Measuring Tools and Measurements exercise Prep for Quiz 4</p>
03/25/2009	<p>Quiz 4 Ch 10. Surface Plate Inspection Methods. Ch 10. Homework review. NDT/Eddy Current Testing Lecture</p>
04/01/2009	<p>Review Quiz 4 Ch 11. Special Measuring Equipment and Techniques. Ch 11. Homework review. NDT/Ultrasonic Testing Lecture</p>
04/08/2009	<p>Spring Break No Class</p>
04/15/2009	<p>Tentative Tour (TBD) Subject to change without notice</p>
04/22/2009	<p>Ch 12. Lot-by-Lot Acceptance Sampling Plans. Ch 12. Homework review. NDT/Infrared Testing Lecture Prep for Quiz 5</p>
04/29/2009	<p>Quiz 5 Ch 13. Statistical Process Control. Ch 13. Homework review. Prep for final exam.</p>

05/06/2009

Review Quiz 5

Final Exam

Released from class immediately following test.

Cell Phone Policy

Cell phones and cell phone activity is not allowed during class. Reserve cell phone calls for breaks.

Note 1

If you are absent from class it is your responsibility to contact the instructor to get missed lecture materials.

Note 2

Because the students of this class are transported to KSC together, if you need to leave before the end of class, make other arrangements. The entire class will not be dismissed to accommodate you.

Note 3

Syllabus is subject to change