MECH 7330/7336: Experimental Mechanics  
Prerequisite: MECH 3130 or equivalent  
Spring 2015

Instructor: Hareesh Tippur, Professor of Mechanical Engineering, Auburn University, AL

Office: 1446 Wiggins Hall, Tel: 844-3327, email: htippur@eng.auburn.edu,  
Website: http://www.eng.auburn.edu/users/htippur/  
Office Hours: Tu, Th 11-12.

Tentative Course Outline
Introduction to Mechanics of Solids, Applied Elasticity Theory  
Strain Gage Theory and Strain Gage Instrumentation  
Optical Birefringence, Polariscopes, Transmission Photoleasticity  
Moiré Methods – In-Plane and Out-of-Plane Measurement Techniques  
Advanced Techniques – Random Speckle Methods and Digital Image Correlation

Text Book:  
Experimental Solid Mechanics, A. Shukla and J. W. Dally, College House Enterprises, LLC, 2014.

Reference:  
Experimental Stress Analysis, J. W. Dally and W. F. Riley (3rd or 4th Edition).

Tentative Grading and Evaluation Procedure:  
Home Work 40%, Projects and/or Term Papers 45%, Final 15%  
Above Class Average: A, B  
Equal to or Below Class Average: C, D, F

Attendance:  
Class attendance is expected but not recorded. Late submission of assigned work, project report or make-up of examinations will be allowed only if accompanied by an approved University excuse.

Honesty Code:  
All portions of the Auburn University Student Academic Honesty Code, as found in the Tiger Cub and defined in the SGA Code of Laws, Title XII, will apply in this class.

Accessibility:  
It is the policy of Auburn University to provide accessibility to its programs and activities, and reasonable accommodation for persons defined as having a disability under Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990. Students who need special accommodations should make an appointment to see the instructor as soon as possible or contact the Student with Disabilities Program office at (334) 844-5943 (Voice/TT)

AU Academic Contingency policy:  
If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation (such as an H1N1 flu outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

Notes to Off-Campus Students:  
For off-campus students, assignments will be considered on time if they are postmarked, faxed, or sent by email on the due date indicated on the top of the first page. The due dates for on-campus and off-campus students will be the same. If submitted after the due date, the assignment will be considered late. Late assignments will be graded at the discretion of the instructor. If graded, a penalty will be assessed. Please note that submission of late assignments near the end of the semester will likely lead to an incomplete being issued in the course, and may significantly delay the issuing of your final course grade.