Date: Winter, 2008  Instructor: Dr. David C. Murrin

Calendar Description:
8054 Advanced Marine Vehicles examines the concepts used in the design of advanced marine vehicles. Emphasis will be given to: structural design of craft constructed from fiber reinforced plastics; high speed marine vehicles (powering, structures, sea keeping and model testing); small craft.

Main topics:
• Construction materials and methods
• Fibre-reinforced plastics (FRP)
• Mechanics of composite materials
• Performance of composite materials
• Fabrication of composite materials
• High-speed craft
• Small craft

Laboratory Exercises:
Destructive testing of a panel from a lifeboat. The laboratory experiment is group-based.

Instructional hours: 2×75 minute lectures per week, 1×3 hour laboratory per week.

Assessment:
Assignments 10  (5× weekly assignments)
Midterm exam 30  (1× midterm exam)
Laboratory work: 10  (2× lab exercises)
Final exam: 50
100

Reference books:

Reports of the High Speed Marine Vehicles Committee, International Towing Tank Conferences

Office hours: 10:30-11:45 am  Tuesdays and Thursdays

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