



# MECHANICAL ENGINEERING NEWS

October 7, 2002

A newsletter for the UML Mechanical Engineering community (also available online at <http://m-5.uml.edu>)

Any items you would like to see included in the newsletter or any suggestions/comments?

Please email them to: [medept@uml.edu](mailto:medept@uml.edu) or leave them with Jackie Paradise in the Mech Eng office.

## Mechanical Engineering Seminar Series - Speakers for Fall 2002

**Oct 18** Frank Pechinsky, Raytheon Missile  
Systems Division

**Oct 25** Eric Denys, Federal Mogul

**Nov 1** Frank Costanzo, Naval Surface Warfare  
Center – Carderock Division

**Nov 8** Gene Niemi, UMASS Lowell –  
Mechanical Engineering

**Nov 15** Jason Allaire, Lawrence Pumps

**Nov 22** Tom O’Leary – EMC Corporation

**Dec 6** Dave Crompton – SSG Inc – Optical  
Systems Division

**Dec 13** (open)

## Senior Executive Forum

Monday, Oct. 21, 2002

Senior Executive Forum presents: Rick Pierro,  
President and Co-founder, Superior Controls will  
talk on "Automation, Engineering, and Starting  
an Engineering Firm after College."

Automation Technology is rapidly changing the way we work and live. It is creating whole new industries requiring engineering/management talent. Rick will discuss how Superior Controls implements automation projects specifically for the Biotech and Chemical Industries. He will also discuss the process of starting and growing a successful business and how his Chemical Engineering education has helped him in this endeavor.

This should prove to be a very good talk and students should take time to come listen to Rick.

## Mechanical Engineering Advisory Board

The purpose of the Mechanical Engineering Advisory Board is to provide the Mechanical Engineering Department with guidance for its academic programs, consistent with the department’s mission, to help ensure that graduates will have received the highest quality preparation for their professional careers. The board is an important group that meets to discuss and guide our educational curriculum. Our whole program improves as we include important feedback from our Advisory Board. Student involvement is also an important part of that whole process.

We are looking for ME students who wish to meet with the Mechanical Engineering Advisory Board Members at the Fall 2002 meeting on Thur Oct. 17. Join in and help make our program better. Remember the famous words of John F. Kennedy when he said “Ask not what your country can do for you, but what you can do for your country.”

*Please leave your name and contact information with Jackie Paradise in the Mechanical Engineering office if you are interested in participating.*

## CAREER FAIR – October 24th

Get that resume and dust it off! The Career Fair will be held on October 24<sup>th</sup>. For more info, contact Career Services or visit their website (<http://ocs.uml.edu/>). This is an excellent opportunity to visit with companies and get yourself prepared for the interview process.

### **WHAT !!!!!**

You don’t have your resume put together !!!!!  
You should always have your resume prepared and up-to-date. You never know when an opportunity may arise.



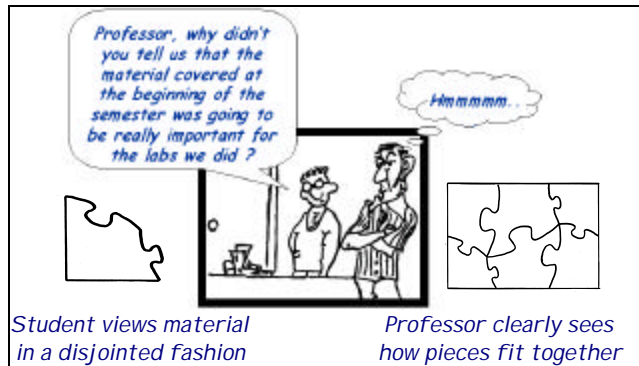
# MECHANICAL ENGINEERING NEWS

October 7, 2002

A newsletter for the UML Mechanical Engineering community (also available online at <http://m-5.uml.edu>)

## Editorial – Peter Avitabile

Teaching is a very difficult task. Professors constantly struggle with new and different approaches to try to impart their knowledge in a clear, concise and useable form so that students have the skills necessary to cope with real engineering problems as they depart from their educational experience and start to work in an engineering related field. Unfortunately, the professor very clearly sees how all the material is related but the student doesn't always realize how each piece of the puzzle fits together.



In a university environment, there must be some way that material gets organized. This is done as follows. Material is presented in modules of similar generic information (courses) that are needed to solve more complicated problems as the student progresses through his/her education process. Students are presented material in a sequential format that builds up a set of tools necessary for upper level specialized courses in their particular field of study (mechanical, civil, chemical, etc).

The overall course sequence and requirement of prerequisite material naturally tends to make the inexperienced student think that material is disjointed – each course presents material as a set of tools that, from the student's perspective, has no relationship whatsoever to material presented later on in the educational curriculum.

Students naturally tend to hit the “reset button” after each and every course since there is no apparent reason to want to actively retain required information. (Not only from one course to another but also within a given semester, students always inquire if material from the first test will be included in subsequent tests.) The nature of the way courses are presented, unfortunately, reinforces this incorrect attitude towards the material.

The student must start to take ownership of the material presented in class. The theories, equations and related material must be fully understood in order for the material to make sense. In other words, the student must live the material everyday – not just for exams, quizzes and finals.

At times, students get so hung up on grades that they lose sight of the purpose of education. It doesn't matter if they receive an “A” in a course if they work on a project and the “bridge falls down”



But boss, I just left out a decimal point. Don't I get at least partial credit?

And remember that “Thinking is not optional” All of your courses are important pieces of the “big picture”. Unfortunately, you won't realize that until after you are out working in industry and say to yourself “Gee, I wished I would have paid more attention when I was in school”.