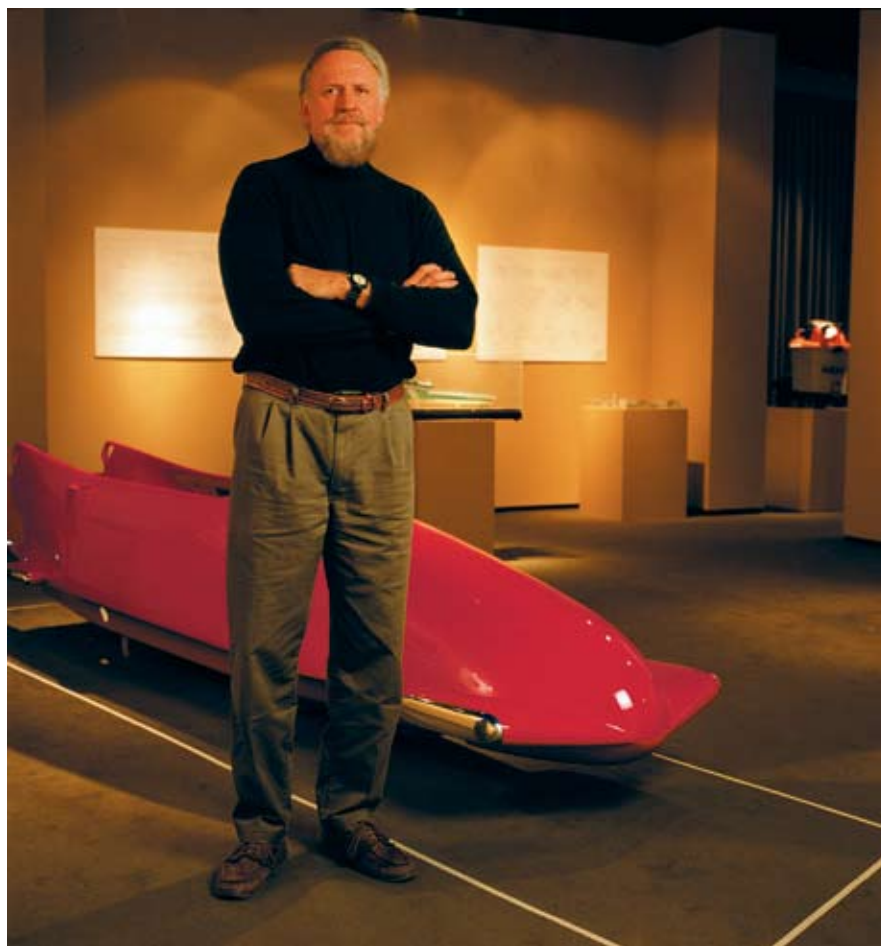


Industrial Strength Design

BY KATHLEEN THAMES



Dr. Jerome Malinowski, professor of industrial design, with a bobsled he designed for the USA team that competed in the 1992 Winter Olympics.

INDUSTRIAL DESIGN PROFESSOR JEROME Malinowski challenges his senior students:

“Five years from now, tell me how you’ve changed the world.”

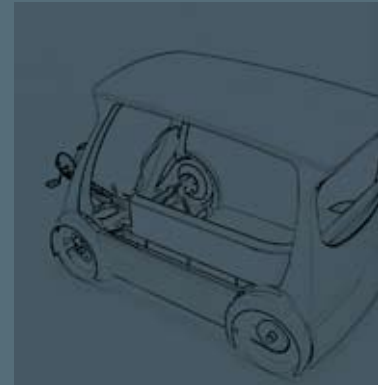
The work of many of his former students will speak for them.

Jonathan Swift, for example, is helping design the crew module for Orion, NASA’s next generation of space shuttle. Benji Beagh is working for ITEM Design, a top flight design firm in Rhode Island. Brooks Vaughn was hired as a designer for Hewlett Packard in Houston after it conducted an international search to fill the position. Brian Canova is a designer for Four Star Group. One of that firm’s clients is Target, a national retail giant with a reputation for products that are sophisticated and stylish, yet affordable.

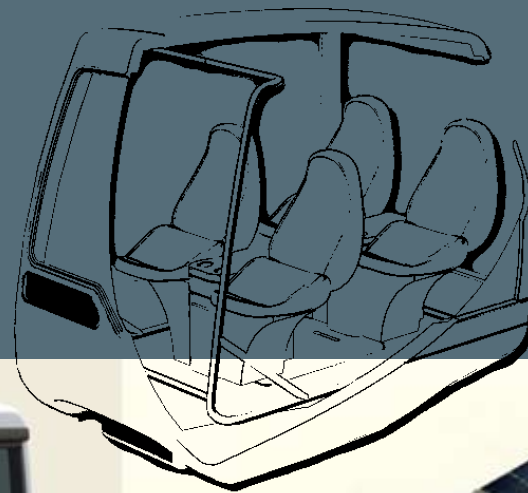
UL Lafayette is the only university in Louisiana – and one of only a few in the South – that offers an industrial design degree. It draws students from across the country. How do they find out about the industrial design program? “Word gets around,” Malinowski replied.

Any student who does some homework before signing up for one of Malinowski’s courses learns that the professor

ROBEY DUPEIX

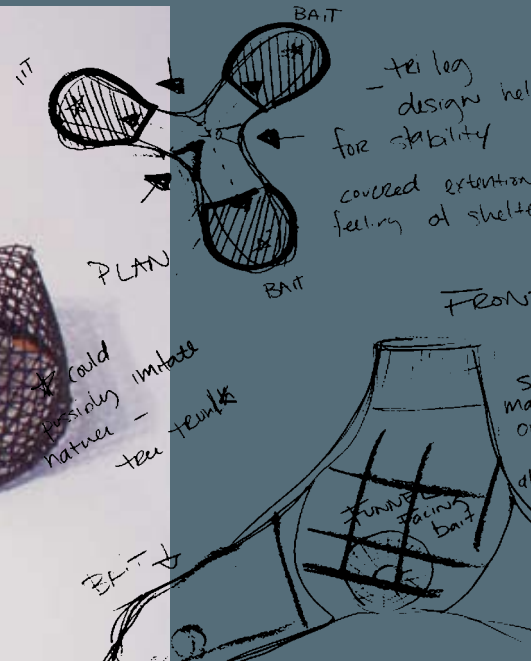
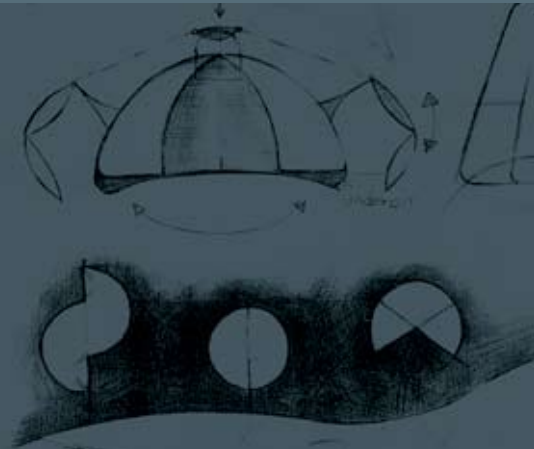


Above: A student team composed of Benjamin Beagh, Rebecca McMillan and Ben Spencer redesigned this second-generation, human-powered transit vehicle in 2005. The first-generation vehicle is shown in the inset. Right and below: Benjamin Beagh designed an ultralight monorail system that could rely on solar power. Professor Jerome Malinowski said it's feasible because lightweight, composite support beams for the track could be placed on existing rights-of-way, eliminating the need to acquire private property. The monorail would have many small units that would each carry four to six people.





Examples of UL Lafayette student designs, clockwise from top left: flatware, Josh Pichon; seating, Michelle Ashcroft; upholstered stool, Matt Johnson; sink sprayer, Matthew Wiltz; crawfish trap, Rebecca McMillan; and environmentally friendly hangers, Matt Johnson.



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has already changed the world a bit, in his own way.

In 1964, he helped design the first Ford Mustang, a sporty, inexpensive car that altered forever the way Americans would think about automobiles. His revolutionary bobsled design enabled a U.S. team to come within 2/100ths of a second of capturing a medal in the 1988 Winter Olympics. He was the first Westerner to work for Matsushita Electric Corp. in Japan, parent company of Panasonic. And, he helped redesign the presidential limousine after John F. Kennedy was assassinated while riding in a convertible limo in Dallas in 1963.

After teaching industrial design and art at Syracuse University for more than 30 years, Malinowski started considering a move to a warmer climate. He heard of a vacant teaching position at UL Lafayette and headed south to check it out. He liked the university and was fascinated with the Cajun and Creole cultures. He joined the College of the Arts faculty in 1999.

Malinowski and the other industrial design faculty members, Andy Loewy and Brooke Davis, teach fundamental principals but stress “real world” applications. Over the years, for instance, their students have been asked to devise a better crawfish trap, improve the efficiency of ambulances and create attractive recycling bins for festival grounds.

“I think we’ve got some really good designers,” Malinowski said, proudly, adding that their imaginations and ideas keep his job fresh and engaging. “I never know what to expect when I walk into class.”

This semester, Malinowski

wanted his fourth-year students to create a mobile unit that can be used for medical triage at disaster sites. It’s a project inspired by Hurricane Katrina, which struck New Orleans on Aug. 29, 2005.

“Evidently, after Katrina, there were about 550,000 people who evacuated and rushed to hospitals, shutting down the medical systems. Out of the whole 500,000-plus people, only 5,000 really needed medical help,” he explained.

Before Malinowski’s class began one day in October, fourth-year student Matt Johnson described the project’s parameters. He noted that the professor gave students a break by allowing them to use an existing trailer, rather than requiring them to start completely from scratch.

The first step: research. Lots of research. “We’re encouraged to follow up on everything, whether it’s going to pan out or not,” Johnson said.

There are plenty of challenges, ranging from ensuring patient privacy to avoiding the contamination of the medical unit’s interior by patients who may have come from hazardous environments.

“Energy is a difficult issue for this,” Johnson continued, tapping a photo of a trailer with the end of a pen. Since electricity is often not available at a disaster site, the students had to consider alternatives. Windmills were

debated, but rejected. Solar power seemed to be a more realistic option.

When the class began, students made presentations about the progress of their work. Malinowski listened carefully, occasionally asking a question or offering issues to consider.

One team had fashioned some crude figures, to scale, that represented patients who would use the model they had built. Malinowski urged them to pay more attention to what might seem like a minor detail. In

the “real world,” he said, pointing to one of the rough figures, “this can kill your presentation.”

Johnson said Malinowski provides “a wealth of really interesting and practical information” and sometimes turns to others to provide instruction about specific aspects of professional practice. A patent attorney spoke to the class about protecting original designs, for example.

That tracks the College of the Arts’ mission to prepare graduates well for their eventual careers.

Gordon Brooks, dean of the college, said all faculty members teach their students to come up with practical solutions to problems and to take a project from conception to the marketplace.

“An education, especially a design education, is really an education in solving problems,” Brooks said. “If you’re going to be a jewelry maker, for instance, you have to have an idea, sketch it, buy the materials, fabricate it and eventually market it. Those are life skills that you can convert to any profession. Once you teach these skills to these students, they can make their own way, doing whatever they choose.”

Jonathan Swift, the UL Lafayette grad



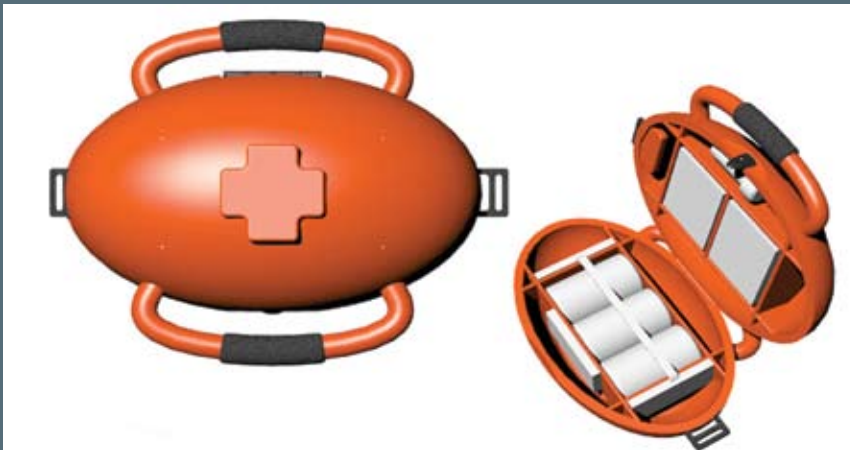
Fourth-year student Jared Williamson works with a model in Fletcher Hall. The students are studying a volumetric hurricane disaster mobile unit.



This fall, fourth-year students were asked to design a mobile unit that could be used for medical triage at disaster sites. It’s a collaborative project with Louisiana Emergency Medical Units in Lafayette. Shown, from left, are Professor Jerome Malinowski, Josh Pichon, Lesley Picard and Michelle Ashcroft.



Industrial design students created items in 2005 that would be useful during natural disasters, such as hurricanes. Top: Ryan Boudreaux, Luke Hammonds and Dana Champagne created an over-the-shoulder device that employs a cartridge, or module system, for dispensing water and food. Below: This waterproof container, designed by David Domingues, Eric Ledet and Sterling Birdwell, could hold emergency supplies and be used as a flotation device. Bottom: A survival pack, made from recyclable Louisiana agricultural products, was designed by Benjamin Beaugh, Rebecca McMillan and Ben Spencer. It would contain enough food and water to keep one person alive for three days, along with a solar blanket that could be used as portable shelter.



MALINOWSKI AND THE OTHER INDUSTRIAL DESIGN FACULTY MEMBERS, ANDY LOEWY AND BROOKE DAVIS, TEACH FUNDAMENTAL PRINCIPALS BUT STRESS “REAL WORLD” APPLICATIONS. OVER THE YEARS, FOR INSTANCE, THEIR STUDENTS HAVE BEEN ASKED TO DEVISE A BETTER CRAWFISH TRAP, IMPROVE THE EFFICIENCY OF AMBULANCES AND CREATE ATTRACTIVE RECYCLING BINS FOR FESTIVAL GROUNDS.

who is working on the design of the next space shuttle, said in a recent interview that exposure to the practical aspects of the business of design has helped in his job at Lockheed. “Jerry’s stories and his experience gave me a better understanding of the workforce, the workplace. The whole program – from taking something from conceptual design to actually making a model and prototype, and actually going through manufacturing it – is basically the same thing we do here on a large scale.”

Another way the College of the Arts helps prepare industrial design students for their careers is by providing as much equipment and technology as possible.

There are an exceptional woodworking shop and a metal shop at Fletcher Hall. Faculty secured a Board of Regents Enhancement grant to build a foundry there, too.

“We also have two 3-D printers that actually print out a 3-D model in plastic. You then sand it down and paint it. So it actually is a working model,” Brooks said.

All students in the College of the Arts will soon have access in Fletcher Hall to some of the latest visualization technology, a 3-D stereoscopic environment. “We will have what we’re told is one of the best 3-D screening rooms in the country. Only Disney Studio’s facility in Orlando will be more advanced,” the dean continued.

That means industrial design students will be able to create 3-D models on a computer and then, in the visualization environment, “literally twirl it around in front of them and see it not only in 3-D, but stereoscopically. If you’re going to teach industrial design architecture the way we believe we ought to teach it – which is a combination of hands skills, traditional skills and high-tech – then you really have to provide the latest technology.”

It’s the kind of resource Malinowski’s students can use to change the world. ■