A low-slung, pedal pushing, paddle wheeling invention of six senior design class students, in the School of Engineering Technology, covered a five-mile land and water course in just over 33 minutes last summer to walk off with the top prizes in the human-powered amphibious vehicle competition.

In the process the students also earned some high grades in the Mechanical Engineering Technology course taught by Herbert Crosby.

Three of five vehicles invented and constructed by Crosby’s students completed the race relatively unscathed, but the secret to the success of the winning entry was its ability to navigate the water lap on the Stillwater River in a little more than nine minutes without breakdown.

Two other vehicles were not so fortunate. One capsized and sunk, and another was unable to compete with the current and only covered half of the course.

But perhaps the saddest story was that of one vehicle that started fast with its crew of two but ran afoul of a truck on the land route, left the road and twisted a rear wheel. It continued in the race with one rider running alongside, but finally the tire on the bent wheel blew and the crew carried the craft across the finish line.

The winning vehicle featured an all-aluminum frame, two fixed bicycle wheels and one steering wheel, side paddle wheels and proved unsinkable. One of the reasons for its excellent time on the course was the angle of the seat backs which gave the two riders maximum leverage to pedal, according to Crosby.

All five vehicles were constructed in privacy around the campus by the 31 students in Crosby’s class as part of a project which required them to design a workable vehicle and then give it a practical application, starting from scratch.

Last year the senior students designed and constructed a cable bridge to be used on a section of Maine’s Appalachian Trail.

Members of the team that built and raced the winning entry were Keith Ladner of Norway, Jeff Norris of Ellsworth, Gary Cyr of Madawaska, Wayne St. Germain of Spencer, Mass., Mark Lamarre of Biddeford, and Rick Levasseur of Lewiston.