the

Clackamas Community College

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Tools of future arrive; usher in age of robotics

Of The Print
Clackamas Community College has taken a quantum leap into the technological age by acquiring three robots that will be used to teach students how to work on and with the tools of the future.

One industrial robot is already here and working, and the three new ones that were unpacked by students Tuesday will round out the clan of electronic educators.

The four robots, named rhinos, will be used to instruct students on how to make the robots coordinate with other working machinery in a simulated environment, and to be a guinea pig of sorts in the sense that students will examine and learn about the circuitry and construction of the robots, Robert Lehman, College instructor who is heading up the robot project said.

Lehman explained that the particular robots chosen had an advantage over most because they feature exposed circuitry. "You can get in there and do some repairs and adjustments without ruining the whole machine," he said.

The College's robot curriculum has not been fully developed yet, and Lehman said that it would be next year before it would be fleshed out.



HERO GETS A workout under the watchful eye of electronic instructor Robert Lehman. Photo by Joel Miller

Lehman explained that there are two different ways that people operate industrial robots. One is through a computer keyboard like a conventional computer, and the other way is by a hand-held lever control box, called a teach pendant, that is connected by wire to the robot, much like an overhead mobile crane is operated by a man from a position on the floor. Lehman explained that this technique of robot programming is

desirable because so many people in the workplace are already familiar with the

operation of the teach pendant, so the robots were adapted for quick acceptance by industry.

The money to buy the four robots was designated to the Electronics Department a year ago for the purpose of upgrading the industrial area of the department. The robots cost about \$4,500 each.

The Electronics Department also has a personal robot named Hero that is able to perform various tasks, and offers the students a chance to work on visal, sonar and speaking robotic circuitry.

Meeting set Monday

Classified contract agreement pending

By Shelley Ball

Of The Print Contract negotiations between Clackamas Community College's Board of Directors and classified personnel could result in a tentative agreement to a two-year contract when both sides meet Monday, June

The last meeting between the classified negotiating team and the administrative negotiating team on May 21 ended with each side offering a two-year proposal.

Kevin Forney, a member of the classified negotiating team explained that while the first year in each of the two-year proposals are nearly identical, there are differences in salary increases for the second year. The classified team had originally asked for a total increase of 6.8 percent, while the administrative side proposed a 5 percent increase.

The classified negotiating team is currently seeking feedback from all classified employees about the Board's second-year offer with survey. At this time 39 responses have come in, and Forney said the deadline for turning in the surveys will be this Friday, June 8. It is at this time Forney said the classified negotiating team will meet to discuss the outcome of the

If there is an overwhelming approval for the second year of the two-contract, Forney said a tentative agreement may be reached when both sides meet again on Monday, June 10. While nothing definite has been decided, Forney said it is his belief that "most people are saying a two-year is just

In regards to the one-year proposal, Forney said the classified team was surprised that the administrative negotiating team agreed to accept their proposal for a layoff clause. "They seemed so adamant in that they would not accept (the clause)," he said.

Should a tentative agreement be reached for a twoyear contract, the layoff clause in the first year would allow any classified members facing layoff to be able to bump less senior employees in another department, rather than face unemployment. The clause would only be exercised when classifie members could stay inside their divisions,



ELECTRONICS TECHNOLOGY STUDENTS Dave Robison and Max Culbertson test the Photo by Joel Miller dexterity of the new robot on campus.

Take a look!

ASG budget cut

Page 3

'Refreshing Nuptials' debuts

Page 5

Ineman going to LSU

Page 8