Making cheese is a slow process, beginning with the cow. Leisurely chewing her cud, an average cow can produce several gallons of milk a day. Six months to a year later, that milk may end up on grocery store shelves as cheddar cheese.

"Some days you have to hurry up, so some days you wait and some days you hurry up and wait," said Leon Labbe, describing cheese making.

Labbe is an assistant professor in charge of USL's creamery, which receives its milk from the university's dairy and supplies milk and ice cream to USL cafeterias. The "deli-quality" cheese is sold in USL's farm store.

USL's battered milk truck arrives at the creamery on Johnston Street early in the morning on cheese making days. Pumped through shining aluminum pipes, the "raw" milk is pasteurized by heating it to about 71 degrees for 15 seconds to kill almost all of the bacteria in it. Then, unlike milk for drinking, milk for cheese is not homogenized by being put under extreme pressure. "Homogenizing takes the fat globules and blows them to hell," said Pat Burkheiser, the laboratory assistant for the creamery.

To make cheese, 300 gallons of milk are placed in a large vat resembling a metal bathtub. The process is started by adding a "starter," a bacteria culture which produces acid, to the pale yellow liquid with buttery fat globs floating on top.

For the rest of the day, the cheese making schedule is determined by acidity. After stirring and adding orange coloring, the mixture "ripen" for anywhere between a few minutes to an hour. When the acid level reaches the right point, rennet is added to make the milk coagulate.

Rennet is an enzyme from the stomachs of suckling calves, said Burkheiser. Today the pure enzyme can be purchased in bottles, but at one time a piece of a calf's stomach was thrown into the mixture and removed later to be reused, he said.

About 15 minutes after coagulation starts, the thickening liquid resembles custard and splits slightly when a finger is pushed through it. The infant cheese is cut by running wire screens in a criss-cross pattern through the vat to start removing the whey, or liquids, from the curd.

"The idea is to have (quarter-inch) cubes," said Labbe. At this point, the curd is sweet tasting, slightly rubbery and delicate.

The milk mixture, which resembles tofu or watery cottage cheese, is stirred constantly as it is cooked for about one hour. While cooking, the curd hardens to resemble buckshot. Then, the whey is drained away.

As it becomes more like cheese, the curd is cut into slabs and turned several times so it will have an even consistency. This takes about two hours and is known as the "cheddaring process." Edam cheese isn't flipped.

After milling to remove curd clumps and salting, favorings such as jalapeno peppers, bacon or onions can be added to the young cheese. It is packed into 20 pound boxes, called "hoops," lined with cheesecloth and placed in a press overnight to continue draining the whey.

The next day, the cheese is cut into 5-pound blocks which are wrapped in cheesecloth and put in wooden boxes for aging in a 40-degree cooler for six months to a year.

Some commercial cheese makers sell "green cheese" which hasn't aged as long, Labbe said. "But, of course, we don't think it has the flavor that this does," he said.

USL's creamery won't be making cheese much longer since it is slated for closure because of a drop in student enrollment. USL's creamery won't be making cheese much longer since it is slated for closure because of a drop in student enrollment, said Alan DeRamus, head of the dairy and creamery program. The dairy has a one-year reprieve to see if he can make it break even financially, he said.

Labbe operates a water-powered cheese press

Labbe and Burkheiser cut curd to separate the whey after coagulation