

# Math class offers new piece of p

**Mark Foster**  
The Clackamas Print

In 2005, a group of students had run out of classes to take at Clackamas. The college felt they could offer more for these students, and a plan was put in place to create another math class which would give them, and other students, an opportunity to continue their mathematical education at Clackamas, thus Math 299 was born. It's not your average sit-listen-take notes math class but a more interactive and student run class.

Hailing from Missouri, Mark Yannotta came to Clackamas to teach this class. The class moves on from general computation-based calculus to proof-based courses such as advanced calculus and abstract algebra. Yannotta's class is a prep class, and it covers about two-thirds of what would be covered in a 300 level math class at a four-year university. The class covers a lot of what is typically not covered in a 200 level class.

Depending on what was accomplished the previous class, Yannotta either helps finish what was not finished or poses a new task for students. Keri Tegmeier described the class as being, "more student directed and flexible" when it comes to finishing a task. Tegmeier, who hopes to become an engineer, said that Yannotta does not push students but rather lets them figure it out on their own.

Yannotta noted, "A lot of what goes on in class happens on the fly."

In the actual class, Yannotta asked his students "What does it mean to have a Sudoku property?" Each student sat quietly thinking over the answer to the question on their own.

As the students worked meticulously, Yannotta told them, "If you're not upset, you're not learning." This is his interpretation of a quote from psychologist Ernst von Glasersfeld. What Yannotta means by this is that students struggle with the ideas presented and change their way of thinking as opposed to just absorbing the material he has put forth.

As they begin to come together, Yannotta has the person with the most number of elements in their middle name answer first.

At the table furthest from the front, the group decides that Charles Mitchell has the best answer, "Linear relations retain a strict pattern of singularity using all options thusly."

Every class Yannotta's assistant, Amy Brandonburg, is there to film the class. Brandonburg, currently a math major at Portland State, is no stranger to this class. She previously filmed the class once before and has also taken it and helped co-teach it at PSU.

The class is partnered with PSU through a federal grant offered by the National Science Foundation. All the film and data materials gathered during class, are eventually sent off to universities across the nation.

In the short history of Math 299, there have been only four female students. In the current class, there are five female students out of the nine enrolled. Rosanna Cole and Tegmeier both

agreed that good recruiting helped to bring in the female students. Cole has taken classes with Yannotta before and was drawn in by his enthusiasm for the class.

Cole likes that in this class there are no real right answers. Theory plays a large role and students are encouraged to delve into what these theories really mean.

Yannotta said, "By taking Math 299, students get an opportunity to discuss proof within

the context of a mathematical area they later."

The course sheds light upon subjects many will never study, and it seems as if he has found a way to connect with students and make material understandable.

"One becomes a mathematician not because of what they learn, but also because of what they do," said Yannotta.



Michelle Newby Clackamas

As opposed to having individual seats, this class seats students at group tables so they can work together. Here students are seen socializing as they wait for class to start.

## The Clackamas Print

The Clackamas Print  
19600 S. Molalla Ave.  
Oregon City, OR 97045  
503-657-6958, ext. 2309

**Editor in Chief:** Lydia Emily Bashaw  
**Copy Editor:** Matthew Ostergren  
**Web and Graphics Editor:** Kayla Berge  
**News Editor:** John Hurlburt  
**A&C Editor:** Abigail Neet  
**Feature Editor:** Nick Kornafel  
**Sports Editor:** Kayla Calloway  
**Photo Editor:** John Shufelt  
**Photo Editor:** Robert Crawford

**AD MANAGER:** Meredith James  
**STAFF WRITERS/ PHOTOGRAPHERS:**  
Dale Balbi, Jessica Foster,  
Mark Foster, Brad Heineke,  
Jaycob Izso, Michelle Newby,  
Lisa Sellars, Greg Stoltz, Mark  
Sunderland

**PRODUCTION ASSISTANTS:**  
Kelsey Schneider, Sean Huggins

**JOURNALISM ADVISER:**  
Melissa Jones

**DEPARTMENT SECRETARY:**  
Pat Thompson

**GOALS:** The Clackamas Print aims to report the news in an honest, unbiased, professional manner. The opinions expressed do not necessarily reflect those of the student body, college administration, its faculty or The Print. E-mail comments to chiefed@

# PAY NOW OR PAY LATER

**!STARTING SUMMER TERM!**

PAYMENT IS DUE AT THE TIME OF REGISTRATION. IF YOU CANNOT PAY YOUR BALANCE IN FULL WHEN YOU REGISTER, YOU WILL NEED TO SET UP A PAYMENT PLAN THAT HAS A \$15 SERVICE FEE AND REQUIRES 1/3 OF YOUR BILL TO BE PAID BY THE END OF WEEK TWO, ANOTHER 1/3 PAID BY THE END OF WEEK FOUR, AND THE FINAL 1/3 PAID BY THE END OF WEEK SIX.