

SURF IN THE SCIENCE LAB

Across Town, Another Surf-centric Lecture Invades Academia

In an effort to make freshman year less daunting, UC San Diego now offers a one-unit class exclusively for first-year students called The Physics of Surfing. Participants learn the fluid dynamics of a surfboard, how swell is generated and, more importantly, what makes Black's Beach rip so hard.

Taught by Professor of Geophysics David Sandwell and Associate Professor of Mechanical and Aerospace Engineering Stefan Llewellyn Smith, the course fea-

tures a series of lectures as well as two experiments in which a "volunteer surfer" from the class rides a longboard with a GPS receiver and an accelerometer duct taped to the nose. Students process the

resulting data and study video footage to learn about the velocity and acceleration that a boardrider experiences.

"These experiments have never been done before," said Sandwell, a veteran surfer. "We're just doing longboards, but you can imagine what it would be

like to strap it on a shortboard and see what kind of velocity you'd get on a bigger wave."

Could this data help shapers build more aerodynamic boards? Could a pro improve his performance by better

understanding board drag?

"I'm not sure it's that practical," Sandwell conceded. "But you can see how fast surfers go and stuff like that. It's just fun." —**Denis Faye**

