The heydays of hour-long lectures in front of classroom whiteboards are fading fast. Preparing students to tackle 21st century social challenges also necessitates in-depth and hands-on engagement with complex, open-ended problems. To train the next generation of global problem solvers, the Blum Center for Developing Economies supports novel courses which bring social innovation into the classroom and combine the Bay Area’s entrepreneurship expertise with UC Berkeley’s social sector engagement.

Collaborative Design for Public Health Goals

With support from the Blum Center, Dr. Nap Hosang and Dr. Jaspal Sandhu teach “Designing Innovative Health Solutions,” a practical, project-based class where students learn strategies for collaborative design of innovative public health solutions. Dr. Sandhu explains, “While innovation is happening in public health, it is random and unpredictable. We have a duty to do great work. Consistently. How do we make innovation happen predictably? We use a deliberate process. That’s what our course is about: teaching students how to apply the innovation process to their work to maximize the likelihood of better solutions.” For students in the class, this means working in teams to develop novel solutions for NGOs and social enterprises that seek out the course for assistance on challenge. To inform their innovation consulting projects, the student teams rely on lectures and mentorship from top innovators in the field, including Karen Pak-Oppenheimer, Vice President of World Health Partners and Dr. Krista Donaldson, the CEO of the well-known development engineering company, D-Rev.

The course emphasizes the key importance diverse, interdisciplinary perspectives play in finding effective new solutions to complex challenges. Indeed, while the class is based in the Department of Public Health, last year’s students came from 11 graduate programs ranging from City Planning to Electrical Engineering. The students included former Peace Corp Volunteers, a former ABC health reporter, and consultant managers.

The class is in its third year of students creating real solutions for both local and international
health sector clients. It is highly successful, with all students ranking their experience in the top 10% of classes taken while at UC Berkeley. Still, staying true to its focus on innovation, the class itself is also evolving. Starting in 2014, the class will be organized around annual themes, helping to broaden the class’s reach and keep themes relevant. Said Dr. Sandhu, “This spring, we will focus on food under the theme ‘Eat.Think.Design.’ Our core question is this: How can food make us healthier and happier?” The themes are chosen based on critical and timely issues in the public sphere, rather than the course instructor’s specialties, “With the course we will bring together innovators from across campus who work on food issues, but we also hope to flip the interests of a few students who don’t yet work on food,” said Sandhu.

**Collaborative Innovation for New Engineering Solutions**

Innovation in action can also be found in the Engineering Department, where the Blum Center supports a design class run by Dr. Susan Amrose, a UC Berkeley engineer, and Dr. Mike North, founder of the nonprofit ReAllocate, and design mastermind for the Discovery Channel’s “Innovate This.” Similar to the public health course’s teams, Dr. Amrose and Dr. North’s students work on solutions to challenges presented by social organizations, but the focus is on engineering design and prototyping. Mixing teaching with interactive workshops, Dr. North explains, “there are a lot of important skills that are traditionally not explicitly part of a university education, but that we are emphasizing in this class. We are developing skills in creativity, empathy, storytelling, and being able to collaborate and cooperate.” These are all skills needed to build teams that can create breakthrough solutions to pressing global challenges. This year’s projects included analyzing the feasibility of self-disinfecting toilets in Kenyan slums, examining algae removal options for a Guatemalan lake, and designing a plan for a mixed-business incubator in downtown Oakland.

These new hands-on innovation classes introduce students to the challenges of the real world, explains North: “Life is not about doing things theoretically, but with experience. Students hone in on skills in real-world settings. The world and its problems are ambiguous; we are giving students the rigorous skills to be able to tackle these issues.” By putting innovation back into the classroom, these Blum Center-supported classes are enabling students to think differently from the get-go, steepening the learning curve of life, and better preparing them to serve upon graduation. “Practice is important in the creative process,” explained Dr. North, “To be in an environment where you learn that it is okay to fail.” With a stream of current local and upcoming international projects initiated from these classes, Dr. North and his colleagues are onto something big.