

TEACHING (UCSD)**Classes as a Teaching Assistant:**

Physics 1A: Mechanics	Fall 2012
Physics 1BL: Electricity and Magnetism Laboratory	Winter 2013
Physics 1C: Waves, Optics, and Modern Physics	Spring 2013
Physics 2A: Mechanics (calculus-based)	Fall 2013, Winter 2014
Physics 2C: Fluids, Waves, Thermodynamics, and Optics	Spring 2014, Summer I 2014
Physics 110B: Mechanics II (Graduate)	Winter 2015

Classes as a Laboratory Manager (LTAC):

Physics 1BL: Electricity and Magnetism Laboratory	Summer I, Summer II 2013
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Classes as Instructor:

Physics 2B: Electricity and Magnetism (Calculus-based) <i>Nominated and selected for Summer Graduate Teaching Scholars Program</i>	Summer I 2015
Physics 2B: Electricity and Magnetism (Calculus-based)	Summer II 2016

TEACHING (non-UCSD)

<u>Camden Academy Charter High School, Camden, NJ (Teacher)</u>	2005-2007
Initiated, developed curriculum, and taught AP Calculus-AB in pilot year	
Nominated, schoolwide teacher of the year (2007)	

<u>SUNY Albany, College of Nanoscale Science and Engineering</u>	2010-2012
Initiated, developed curriculum, and taught undergraduate materials science and physics for pilot year of nanoscience undergraduate program	

<u>University of San Diego, Adjunct Faculty</u>	Fall 2014
Taught E&M / Recommended by 100% of students	

Student TA Evaluation Statistics *percent agree; class enrollment in parentheses*

Statement evaluated	1A (343)	1BL (100)	1C (198)	2A (343)	2A (343)	2C (343)	2C (198)	Weighted Average
TA was organized and prepared for class	93	99	99	97	98	99	98	97
TA presented material clearly, answered questions accurately	90	99	98	96	97	98	98	96
TA helped develop my thinking skills on the subject	88	96	95	90	91	95	92	92
TA was generally interested in and enthusiastic about teaching	90	90	97	98	98	99	98	96
I would recommend this TA to other students	96	97	99	98	98	98	100	98

Student Instructor Evaluation Statistics *percent agree; enrolled = 109*

Statement evaluated	2B
Instructor displays a proficient command of material	97
Instructor is well prepared for classes	96
Instructor explains course material well	96
Instructor shows concern for students' learning	98
Instructor promotes appropriate discussion/question	96
I recommend this professor overall	98 (top 1% UCSD physics)

Selected Evaluations from Instructors

Nirag was proactive, anticipating the needs of students. The need for my supervision of his TA work was minimal. Best TA in my 26 years at UCSD.

Nirag was a phenomenal TA and would probably be an excellent course instructor now. He used many interactive elements in discussion section...he was good about getting students to work out problems and communicate with each other...I can honestly say that Nirag is the best Physics TA I've worked with in 8 years of teaching.

Selected Evaluations from Students (both as instructor and TA)

Professor Kadakia creates a truly dynamic classroom environment...he is the only professor that I have seen at UCSD who will take the time in the middle of a lecture to sit down on the steps of the auditorium and talk with students one on one, addressing their problems directly.

Professor Kadakia constantly answers questions, consistently promotes meaningful in class discussions and most importantly translates the impressive, interconnected and beautiful concepts of electricity and magnetism in a way his students can understand and appreciate. He is simply a one of a kind professor.

You showed us not just the mathematical, "plug and chug" perspective of physics, but also the historical significance of everything that we were learning...emphasis on both the conceptual and mathematical aspects of physics added more dimensionality to the concepts I was learning, and in turn helped me understand why the equations were set up the way they were. I also appreciate how you encouraged all of us to participate more in your lectures...I don't think I've ever spoken up during lecture as much as I did in this course. I signed up for this course just to fulfill my major requirements as a biochemistry and cell biology major, but after having taken this course I definitely want to continue studying physics even after I finish PHYS2C.

Not only was the subject matter intriguing, but your energy and enthusiasm also was contagious. It motivated me and encouraged me to put in more time practicing and understanding the material... coming to your class every day ignited a curiosity about physics I had not ever had before.

Professor Kadakia is probably the best professor I have ever encountered at UCSD. He pays so much detail in the way he teaches the material and is very mindful of every aspect of the class. It is very apparent that he cares about his students learning and understanding what is being taught. He even memorized half the class' names. My prior physics class scared me into hating physics, but Professor Kadakia has made me really enjoy the subject.

Professor Kadakia single-handedly made the class interesting and engaging to me. His style of instruction was both informative and intellectually stimulating, especially the balance of conceptual and quantitative learning involved in physics.

Very great and enthusiastic professor. Changed my entire opinion about physics at UCSD.

He is extremely clear and able to explain concepts in such a way that no matter how little understanding of physics you have, you will be able to understand him. His examples are very relevant and easily understandable, and he consistently teaches for longer than the one hour of problem session even though he has two sections; he truly wants his students to learn, and does his utmost to ensure that they do.

Instructor was great at getting students involved during class. He would give incentives to students if people participated, asked questions, and/or answer questions. I believe he brought many people out of their inner shells into speaking up in the class. It wasn't just about physics, it was also about building confidence.

The learning environment was amazing, very involved.

Professor Kadakia breathed new life into my love for physics and teaching. He is an excellent instructor and I believe has really gotten to the heart of the communication of knowledge. He is very clear and concise in a way that makes learning easier and more enjoyable.

He goes out of his way to engage students and hold our interest; his information and demonstrations are always well-prepared. Nirag's greatest strength, though, is his clarity when explaining difficult material. He is specific and concise, answering our questions completely in language we can understand. Discussion with him is often the highlight of my week, and I readily rank Nirag among the best teachers I have ever had.

He was extremely committed to his students...I admire him for the sheer amount of time that he put into this class-two problem sessions per week, as well as countless hours helping us through online discussion forums. ...He is by far the most dedicated TA I have ever had for any class.

He easily hold more discussion sections and office hours than any TA I know.

Nirag's greatest strength was his ease of accessibility. More than any other TA, he provided extra office hours, extra tutorial center hours, extra discussion hours - he gave us every opportunity to contact him and ask for assistance.

He attended every 8:00-10:00pm problem solving session early and with energy. He brought in his guitar and demonstrated different harmonics while we were learning about sound waves and harmonics. He

brought in a bucket of water and several objects when we were dealing with fluids and buoyancy. He brought in a stereo system with large speakers to demonstrate constructive and destructive interference. He was clear and concise. Best TA I've had.

Nirag's attitude was always positive. He never once became annoyed by any sort of lack of understanding on our part, but instead would take that challenge and find new ways to better engage/teach the more difficult concepts.

Lecture style is engaging and organized. He presents very clear connections to real world applications and examples, which combats the dryness of some conceptual subjects. He is very active on [blackboard] and with interaction with students, which can bring a lot of comfort when the class starts to become overwhelming.

He can explain anything well and clearly. Most TA's act like they are superior to their students, but he treats students like equals. This makes him very approachable and easy to get along with.

Some of the analogies and real-life examples that he would discuss stuck with me and definitely helped me learn the material in a more intuitive way than just memorizing equations. Also, the demonstrations that he would bring in to class were a great supplement to the conceptual material. Every physics TA should try to be more like Nirag.

I really liked how he didn't assume that every single person understood something; he made sure to explain every relevant concept with clarity.

I, as well as many others quietly but still really appreciate all that you have done for us and especially focusing so much more on the conceptual parts of the course. This is my second time taking this particular class because I admittedly failed it the first time. I am not a good test-taker but ultimately I have walked away from your class more confident about E&M concepts than I was when I was taking this class for the first time.