

| Instructor | Text Responses |
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| | Question: Comments about student effort |
| | The homework assignments were incredibly difficult. |
| | great course! |
| | I think that some of the assignment questions were beyond the scope of the class. They often required far too much pre-requisite knowledge in another course to realistically attempt, for eg. chaos/nonlinear dynamics/particle physics. The problem with these questions is that they are not self-contained in a Group Theory class: many of the symbols in the equations presented were not explained, and googling does not always help as the lecturer has his own unique notation. It can become very frustrating attempting the homework at times. |
| | I had to spend a lot of time and effort into this course, but it was a level to which I expected. The time required grew with time, so that I was spending much more time on the homework at the end compared to the beginning of the semester. This was pretty tough to keep up with especially for the final 2 weeks or so, but it was still manageable. |
| | Question: Course best aspect |
| | Compete materials for after-class learning and reviewing. |
| | The nature of the course itself, which draws a lot of connections between what looks like vastly difference areas of Physics, already justifies for itself. The content taught in this lecture is essential for any Physicist to truly understand what they're doing in not only Quantum Mechanics but other areas of Physics as well. Its a really enlightening class to take as a Physicist. |
| | Teaches an important mathematical field - group theory - that is often overlooked in a physics education. |
| | Question: Course improvements |
| | The material and online notes seemed disorganized and the homework problems were unclear at times. |
| | This course touches on many different areas of Physics, and thus assumes that the students knows the basics regarding these different areas of Physics. While pre-knowledge about quantum mechanics and particle physics is reasonable, the part on chaotic systems was something I, and probably most other undergraduate physics students, were not ready for. A more gentle introduction to chaotic systems would be appreciated, although cutting time on content for this wouldn't be a good idea. |

I think the title of the course - Group Theory And QM - is a huge misnomer. The course made practically no links to QM. In fact, more links were made to chaos theory than to QM. A more appropriate title would be something along the lines of Group Theory for Physicists or something. That would help to set proper expectations of students taking the course. If the lecturer wishes to stick with the course name, my suggestion is to remove the chaos theory examples (which honestly confused my peers and I way more than it was enlightening) and replace them with explicit QM concepts like Clebsch-Gordan coefficients, spin representations, or even applications to condensed matter like SU(2) spin chains, Z₂ Ising model symmetry etc.

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Question: Instructor greatest strength

Cvitanovic His knowledge on the topic clearly shows in his teaching, and that is in its own way very inspiring to the students. His response to questions, both on and off-line, are usually prompt and clear.

Cvitanovic Dr. Cvitanovic is very knowledgeable on the subject matter.

Question: Instructor improvements

Cvitanovic The one thing I would mention is that the notation of some of the terms changes from lecture to lecture. It would be much easier to follow the lectures if the notations were consistent. Also, the later half of the semester would be better understood if there was a clearer motivation behind what we're studying; at some points it wasn't very clear what's going on until the very end, but it would be nice to have the end in sight from the very start.

Cvitanovic The notation used in class is way too cryptic and extremely confusing. Most of the time symbols are used in class with no explanation as to what they are, and they are not consistent either. The notes are not particularly helpful either, as they are equally cryptic. The chapters I could follow were those in the earlier weeks, simply because he followed content from Dresselhaus's textbook, which was a far easier read. The notes that he began to follow in the later weeks were very difficult to understand. My main suggestion is for Dr. Cvitanovic to explicitly clarify all the symbols used in the notes/lecture, as it is very easy for one to get lost in a more abstract topic like group theory.