

**CHEM 550. Special Topics in Molecular Dynamics: Harmonic Oscillators****MWF 2:00 – 2:50, SSC 604****Curt Wittig, SSC 403, wittig@usc.edu, office hours by appointment****Part Ia. Classical Harmonic Oscillators**

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### Objective

In-depth coverage of selected topics that arise frequently in research currently underway in Physical and Theoretical Chemistry at USC

### Description

The class will examine three important topics in chemical physics through: (i) instructor presentations of the topics, including extensive in-class discussion; (ii) assigned readings in the form of pdf handouts prepared by the instructor (approximately 200 pages). If additional materials prove necessary or desirable, the instructor will provide 100% of these materials. Exams will be oral, one-on-one. In consideration of the material covered, this encourages the most suitable study habits and exam preparations.

### Course Materials

There is no official textbook. The instructor will provide all necessary materials: typed class notes, books, journal articles, etc.

### Grading

Grades will be assigned based on quizzes (10%), three exams (60%) and a final exam (30%). No portion of the grade will be assigned based on attendance.

### **Academic integrity**

It is expected that students will follow the USC code of ethics. For example, plagiarizing a write-up or essay is a serious violation that could result in a grade of zero for the assignment or F for the course. I will not adjudicate individual cases. All suspected integrity violations will be referred to SJACS without prejudice according to the procedure in SCampus § 14.

## **Statement on Academic Conduct and Support Systems**

### **Academic Conduct**

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* Section 11, *Behavior Violating University Standards* <https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

The University does not tolerate discrimination, sexual assault, and harassment. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu> or to the *Department of Public Safety* <http://adminopsnet.usc.edu/department/department-public-safety>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* <http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage <http://sarc.usc.edu> describes reporting options and other resources.

### **Support Systems**

USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs*:

[http://sait.usc.edu/academicsupport/centerprograms/dsp/home\\_index.html](http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <http://emergency.usc.edu> will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.