Course Change Request

Date Submitted: 12/03/18 3:28 pm

Viewing: CSI 786 : Molecular Dynamics Modeling

Last edit: 12/03/18 3:28 pm

Changes proposed by: blaisten

Catalog Pages referencing this course
Computational Science and Informatics (CSI)
Department of Computational and Data Sciences

Programs referencing this
SC-PHD-CSI: Computational Sciences and Informatics, PhD

In Workflow
1. **CDS Chair**
2. **SC Curriculum Committee**
3. SC Associate Dean
4. Assoc Provost-Graduate
5. Registrar-Courses
6. Banner

Approval Path
1. 12/04/18 1:09 pm Jason Kinser (jkinser): Approved for CDS Chair

Select modification type:
Substantial

Are you completing this form on someone else's behalf?
No

Effective Term: Fall 2019

Subject Code: CSI - Computational Science & Informatics **Course Number:** 786

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Molecular Dynamics Modeling

Banner Title: Molecular Dynamics Modeling

Will section titles vary by semester? No

Credits: 3

Schedule Type: Lecture

Hours of Lecture or Seminar per week: 3

Repeatable: May only be taken once for credit (NR)
GRADUATE ONLY

Default Grade Mode: Graduate Regular

Recommended Prerequisite(s): CSI 690 or ~~equivalent,~~ CSI 780 or **equivalent, or** CHEM 633/CSI 711, **or** ~~or~~ permission of instructor.

Recommended Corequisite(s):

Required Prerequisite(s) / Corequisite(s) (Updates only):

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?

Registration Restrictions (Updates only):

Registrar's Office Use Only - Registration Restrictions:

Field(s) of Study:

Class(es):

Level(s): Include
Enrollment limited to students with a level of Non-Degree (SCRRLVL_ONLY_ND)
Limited to graduate level students only. (SCRRLVL_ONLY_GR)

Degree(s): Exclude
Non-Degree Undergraduate Degree students may not enroll. (SCRRDEG_NO_NDU)

School(s):

Catalog Description: Introduces simulation methods in physical chemistry sciences. Covers computational approaches to modeling molecular and condensed matter systems, including interatomic and molecular potentials, **Molecular Dynamics methods,** ~~molecular dynamics,~~ time averages, ensemble distributions, numerical sampling, thermodynamic functions, response theory, transport coefficients, and dynamic structure. ~~Includes stochastic simulations such as Brownian motion, Langevin dynamics, Monte Carlo methods and random walks, and introduction to cellular automata.~~

Justification: This is a slight update to the catalog description eliminating one sentence form it.

Does this course cover material which crosses into another department? No

Learning Outcomes:

Attach Syllabus

Additional Attachments

Specialized Course Categories:

Additional Comments:

Reviewer Comments

Key: 3372