Course Change Request

Date Submitted: 03/08/23 2:06 pm

Viewing: CDS 461 : Molecular Dynamics and Monte Carlo Simulations

Last approved: 12/18/18 4:28 am

Last edit: 03/08/23 2:06 pm

Changes proposed by: blaisten

Catalog Pages referencing this course

Computational and Data Sciences (CDS)

Department of Computational and Data Sciences

Select modification type:

~~Simple~~

Substantial

In Workflow

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

Approval Path

1. 03/10/23 9:58 am Jason Kinser (jkinser): Approved for CDS Chair

History

1. Dec 18, 2018 by Estela Blaisten-Barojas (blaisten)

Are you completing this form on someone else's behalf?

No

Effective Term: Summer 2022

Subject Code: CDS - Computational and Data Sciences **Course Number:** 461

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Molecular Dynamics and Monte Carlo Simulations

Banner Title: Mol Dyn/Monte Carlo Simulation

Will section titles vary by semester? No

Credits: 3

Schedule Type: Lecture

Hours of Lecture or Seminar per week: 3

Repeatable: May be only taken once for credit, limited to 3 attempts (N3)

Max Allowable Credits: 9

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):

Competency in programming at CDS 251 **level or higher,** ~~level,~~ college physics, and MATH 214 **or** ~~or~~ MA TH 216, **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):

Degree(s):

School(s):

Catalog Description:

Covers particle methods to solve variety of physical systems. Emphasizes study of structure and thermodynamics of condensed systems in liquid and solid phases while implementing numerically the Molecular Dynamics and Monte Carlo methods. Applications and projects include a variety of atomistic and molecular simulations based on pairwise interatomic interactions.

Justification:

What: emphasis on the programming skills is added

Why: students are registering without having appropriate programming skills

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: 1925