Department / Academic Program: Chemistry

Course Field of Study: CH Course Number 354M Topic Number

Course Title: Introduction to Computational Methods in Chemistry

Proposed Change

☐ Add
☐ Drop
☐ Contact Hours/Semester Hour
☐ Degree Plan Statement
☐ Meeting Statement
☐ Prerequisite
☐ Restrictions
☐ Same-as-Statement
☑ Subject-Matter
☐ Title

Same-as Statement: 

Restriction: 

Subject-Matter Description: Current: Construction and implementation of numerical algorithms for solving differential equations which are common in chemistry. Subjects include chemical reaction rates, quantum mechanics, molecular dynamics, normal modes of vibration, and Monte Carlo methods. Familiarity with physical chemistry, differential equations, and programming is recommended.

Proposed: Construction and implementation of numerical algorithms for solving differential equations which are common in chemistry. Subjects include chemical reaction rates, quantum mechanics, molecular dynamics, normal modes of vibration, and Monte Carlo methods.

Contact Hours (Lecture): 

Contact Hours (Lab): 

Value in Semester Hours: 

Repeatable:

☐ Yes
☐ No

Grading Method:

☐ Student Option
☐ Pass/Fail Only
☐ Letter Grade Only

Meeting Statement: 

Degree Plan Statement: 

Prerequisite Current: Upper-division standing.

Prerequisite Proposed: Upper-division standing. The following coursework with a grade of at least C- in each: Chemistry 302 or 302H; Chemistry 353 or 353M.

Justification: Upper-division standing is insufficient as a prerequisite. Adding CH 302/302H and 353/353M as a prerequisite will ensure students are adequately prepared in their knowledge of calculus and physical chemistry to succeed in CH 354M.

Date Approved by Dept: 04/18/2017

Form Completed By: Jordan Johnson