Course Change Request

Date Submitted: 02/15/23 3:27 pm

Viewing: MATH 314 : Advanced Differential Equations ~~Introduction to Applied Mathematics~~

Last approved: 10/29/21 5:25 am

Last edit: 02/15/23 3:27 pm

Changes proposed by: csausvil

Catalog Pages referencing this course

Department of Mathematical Sciences

Mathematics (MATH)

Select modification type:

~~Simple~~

Substantial

In Workflow

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

Approval Path

1. 02/16/23 4:49 pm Maria Emelianenko (memelian): Approved for MATH Chair

History

1. Feb 22, 2019 by Gregory Craft (gcraft)
2. May 13, 2020 by Tory Sarro (vsarro)
3. Oct 29, 2021 by Catherine Sausville (csausvil)

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

No

Effective Term: Fall 2023

Subject Code:

MATH - Mathematics **Course Number:** 314

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: **Advanced Differential Equations** ~~Introduction to Applied Mathematics~~

Banner Title: **Adv. Differential Equations**
~~Introduction to Applied Math~~

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):

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?
	(	MATH 214	C	UG		
Or		MATH U214	T	UG		
Or		MATH 214	XS	UG		
Or		MATH 216	C	UG		

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
Or		MATH U216	T	UG	)	

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:

Qualitative approaches to the study of ODEs. Eigenvalues, eigenvectors and the solution of linear systems of equations. Phase lines and phase planes. Nonlinear ODEs. Linearization, stability and classification of equilibrium. Hamiltonian, gradient and conservative systems. Bifurcations in planar systems. Illustration of concepts using models from physics, biology, chemistry, and ecology.

Justification:

What: Change in course title.

Why: The course description was changed in October 2021 and the title change was inadvertently forgotten at that time. The new title better reflects the updated content of the course.

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: 10196