Course Change Request

Mode:

Date Submitted: 02/21/19 11:26 am In Workflow Viewing: CHEM 104 : Chemistry for Changing Times Introduction 1. Registrarto Organic, Biochemical, Pharmacological, and Fuel Chemistry **Courses:Title** Change Last approved: 08/29/17 4:18 am 2. CHEM Chair Last edit: 02/21/19 11:26 am 3. SC Curriculum Changes proposed by: gcraft Committee 4. SC Associate Dean ~ Chemistry (CHEM) **Catalog Pages** 5. Assoc Provost-Department of Chemistry and Biochemistry referencing this Undergraduate course 6. Registrar-Courses LA-BS-INTS: Integrative Studies, BS 7. Banner Programs Approval Path Select modification type: 1. 02/21/19 1:49 pm Tory Sarro (vsarro): **Specialized Course Designation** Approved for **Substantial** Registrar-Courses:Title Are you completing this form on someone else's behalf? Change 2. 02/21/19 4:38 pm No Gerald Effective Term: Spring 2019 Weatherspoon (grobert1): Subject Code: Course Number: CHEM - Chemistry 104 Approved for CHEM **Bundled Courses:** Chair Is this course replacing another course? No History Equivalent Courses: 1. Aug 29, 2017 by **Catalog Title:** Priyanka Chemistry for Changing Times Introduction to Organic, Biochemical, Champaneri Pharmacological, and Fuel Chemistry (pchampan) Banner Title: Chemistry for Changing Times Int Organ/Biochem/Phar/Fuel Ch Will section titles No vary by semester? Credits: 4 Schedule Type: Lecture w/Lab Hours of Lecture or Seminar per 3 week: Hours of Lab or Studio per week: 3 Max Allowable **Repeatable:** May only be only taken once for credit, 12 Credits: limited to 3 attempts (N3) credit (NR) *GRADUATE ONLY* **Default Grade** Undergraduate Regular

https://workingcatalog.gmu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/2196/index.ht... 3/6/2019

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?	

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: Modern and historical accounts of organic chemistry, biochemistry, pharmacology, and fuel

chemistry.Modern course in chemistry to explore and discover chemistry in Topics include the 21st century as it applies to chemistry of carbon containing compounds, polymers, synthesis of polymers and their utility and use in the modern world, biomolecules, DNA and animal cloning, embryonic stem cells, the chemical structure and biological activity of drugs and fuels emphasizing medicines, and fuel chemistry including petroleum through green chemistry. chemistry and the future. Relationship of chemistry as a central science in topics such as novel polymers, amino acids and proteins, post-translational modifications, cancer, aids, medicines and the opioid crisis, stem cells, cloning of DNA and organisms, sustainable and non-sustainable fuels and sources of energy in these changing times. Topics include examples from organic chemistry, conformational analysis, stereochemistry, genetics, protein-protein interactions, forensic science, engineering and biology. Chemistry of relevance and impact to individuals, environments and global perspectives with an emphasis on current societal concerns. (CHEM 104 requires concomitant registration in a 104 lab section.) Notes: laboratory section). Notes: Not open to students majoring in Chemistry, not intended for science majors or credit for 211 and 213. chemistry. Credit will not be given for both CHEM 104 and CHEM 212

Justification: Same course, more modern course description.

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

Learning Outcomes:

Attach Syllabus

Additional Attachments

Specialized Course Mason Core Categories:

Select the Mason Core Requirement the course is proposing to fulfill:

Foundation Courses:			
Exploration Courses:	Natural Sciences w/Lab		
Integration Courses:			

Natural Sciences with Lab

Course must meet the following learning outcomes:

1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding: a) evolves based on new evidence, and b) differs from personal and cultural beliefs

2. Recognize the scope and limits of science.

3. Recognize and articulate the relationship between the natural sciences and society and the application of science to societal challenges (e.g., health, conservation, sustainability, energy, natural disasters, etc.).

4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).

5. Participate in scientific inquiry and communicate the elements of the process, including: a) making careful and systematic observations, b) developing and testing a hypothesis, c) analyzing evidence, and d) Interpreting results.

I affirm that I have attached the following using the syllabus and attachment buttons provided above: (see "?" for help with submission)

Additional administrative changes in prep for CIM launch Comments: Reviewer Comments

Key: 2196