

## **Course Approval Form**

For approval of new courses and deletions or modifications to an existing course.

registrar.gmu.edu/facultystaff/curriculum

Action Requested:  Create new course  Modify existing course (check a Title Credits X Prereq/coreq Sched Other:		X	rse Level: Jndergraduate Graduate
	THERSPOON	Ext: 3-1456 En	' & BIOCHEMISTRY nail: grobert1@gmu.edu
Subject Code: CHEM N (Do not list multiple codes or numbers. Ea have a separate form.)		Effective Term: Fall Spring Summer	Year 2015
Title: Current Chemical Ocea Banner (30 characters max in New			
Credits: x Fixed 3 Variable to		Not Repeatable (NR) Repeatable within degree (RI Repeatable within term (RT)	O) Maximum credits allowed:
Grade Mode: X Regular (A, B, Satisfactory/No Special (A, B C	Credit (check one)	Lab (LAB)	Independent Study (IND) Seminar (SEM) Studio (STU)
Prerequisite(s): Grade of 'C' or better in CHEM 2' 212, CHEM 321, or GEOL 309	Corequisite(s):		Instructional Mode:  x 100% face-to-face Hybrid: ≤ 50% electronically delivered 100% electronically delivered
Restrictions Enforced by Syste "C" or better grade in CHEM 211,			Are there equivalent course(s)?  x Yes No If yes, please list GEOL 458
Catalog Copy for NEW Cours  Description (No more than 60 words  Indicate number of contact hours:	<u> </u>	nse) Notes (List additional inform	nation for the course)
When Offered: (check all that apply)  Approval Signatures	Fall Summer	Spring	
Approvar orginaturos	9/18/2014		
Department Approval	Date	College/School Approval	Date
If this course includes subject mat those units and obtain the necessary			nt must circulate this proposal for review by proposal.
Unit Name	Unit Approval Name	Unit Approver's Signature	Date
For Graduate Courses Only			
Graduate Council Member	Provost Office		Graduate Council Approval Date
For Registrar Office's Use Only: Banner_	Cai	talog	revised 11/8/11

## Course Proposal Submitted to the Curriculum Committee of the College of Science

1. COURSE NUMBER AND TITLE: CHEM 458 Chemical Oceanography

<u>Course Prerequisites</u>: Grade of 'C' or better in CHEM 314, CHEM 318, CHEM 321, MATH 114, PHYS 243 or PHYS 160

Update: CHEM 211, CHEM 212, CHEM 321 or GEOL 309

These are the prerequisites that were in effect in the 2013-2014 catalog, before all the errors were introduced into the current catalog. In the previous course approval form, Geol 302 was listed erroneously. It should be Geol 309.

## **Catalog Description:**

**5. TENTATIVE SYLLABUS:** 

The world's oceans, including a variety of closed basins and estuaries, comprise a complex and dynamic system of chemical processes that interact with biological, geological, physical, and atmospheric processes to play a significant role in defining the earth's fragile environment. This course will present an overview of the origin, occurrence, and distribution of the chemical components in sea water and an introduction to the basic principals of the chemical processes taking place in the marine environment.

2. <u>COURSE JUSTIFICATION</u> :
Course Objectives:
Course Necessity:
Course Relationship to Existing Programs:
Course Relationship to Existing Courses:
3. APPROVAL HISTORY:
4. SCHEDULING AND PROPOSED INSTRUCTORS:
Semester of Initial Offering:
<u>Proposed Instructors</u> :