ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated By the Academic Senate Secretary On Canary Color Paper)

Proposal # 15-11	Title: College Chemistry II Lab
F10p0sa1# 15-11	Title. Conege Chemistry II Lab
(Proposal explanation submitter and	college dean signatures on attached program/degree or course revision form.)

All proposals MUST have their originating college faculty body (Ex. Arts & Sciences, Education and Nursing; Technical Sciences) approval and must be signed by the submitter and the college dean before being submitted to the Academic Senate Secretary.

- 1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms or General Education Inclusion form) to the Academic Senate Secretary. NOTE: Level 1 or Level 2 forms must be submitted concurrent with this proposal where applicable. For Education proposals, PEU approval must be received prior to forwarding the proposal to the Senate.
- 2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): General Education (if applicable), or Curriculum. A transmittal e-mail will be sent to the Recording Secretary of the receiving committee, cc Provost's Administrative Assistant, by the Academic Senate Secretary. A digital copy of the proposal will be linked on the Academic Senate Proposal page by the Academic Senate Secretary.
- 3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is returned to the Academic Senate Secretary for forwarding to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator, via the Academic Senate, when a proposal is disapproved and the proposal is returned to the originator. Upon completion of committee action, the proposal will be returned to the Academic Senate Secretary, and a transmittal e-mail sent by the Committee Recorder to the Senate Secretary, cc Provost's Administrative Assistant.
- 4. The Academic Senate considers the proposal and recommends approval or disapproval. If approved, the proposal is forwarded to the Provost for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration, utilizing the procedures set forth in the Senate Bylaws. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
- 5. Approved proposals will be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor. From this point forward, the Provost's Administrative Assistant will update the Proposal page on the website.
- 7. The Chancellor approves or disapproves the proposal.
- 8. The proposal will then either be implemented or referred to MSU for further action. The tracking page on the Provost site will be updated as required.

Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page -- http://www.msun.edu/admin/provost/senate/proposals.htm

Documentation and forms for the curriculum process is also available on the web page: http://www.msun.edu/admin/provost/forms.htm

*****(If a proposal is disapproved at any level, it is returned through the Academic Senate secretary and the Senate President, to the Dean of the HERN submitting college who then notifies the originator.

	Date	Action Taken	Signature	Date	Comments/Reason for Disapproval	Sent to	Date	Transmittal E-mail sent
*Abstract received by		Copy to Senate President. Forward						
Senate Secretary		to Provost.						
*Provost		☐ Abstract Approved						
Received by	10/02/15	Disapproved Tracking form	Lourdes Caven	10-02-15		Senate	10/05/15	
Senate Secretary	10/02/13	initiated	Louides Cavell	10-02-13		Schate	10/03/13	
General Education		Approved						
Committee (if applicable)		☐ Disapproved						
Curriculum		Approved						
Committee (if applicable)		☐ Disapproved						
Academic Senate	10/05/15	Approved	and I dust	volisti-		Provost	11)-11/14	
Full Faculty (if necessary)		☐ Disapproved	oper party	(1,2/1)		Movosi	10 19-L	
necessary)		Disapproved						
Provost		✓ Approved ☐ Disapproved	1.60: 0	0.00		Changelor	1.1216	
Chancellor		Approved	ducan y.	rigg		- runguo i		
		Disapproved	Lugay D Logel	3.17.2016				
MCH								
MSU		☐ Approved ☐ Disapproved	NIA					
BOR		☐ Approved ☐ Disapproved	NIA					
NWCCU		☐ Approved ☐ Disapproved	N/A					
Provost		Advise originating college and Academic Senate of status. Update Web						
Registrar		page. Catalog/Policy Manual Update						

NOTE: The secretary of the Academic Senate will update the Academic Senate Proposal web page from initial receipt until the proposal reaches the Provost. The Provost's Administrative Assistant will ensure that the current status of each proposal is maintained on the Academic Senate Proposal web page from that point forward.

*Abstract and pre-approval required for new programs ONLY.

Academic Senate Form 1 (Revised 3/21/2012)

CEASN PROPOSAL TRACKING SHEET

(Document to Be Originated By CEASN Secretary) AUG 3 1 201

 Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the CEASN Administrative Assistant. OFFICE OF THE PROVOST MSU NORTHERN

2. The CEASN Administrative Assistant forwards them to the appropriate CEASN Committee.

2018 2016 # 15 Title	:: College Cr	remistry II lab
	Date	
Received by CEASN Administrative Assistant	8.6.15	
Forwarded to CEASN College Meeting	8.20.13	Approved Disapproved 8/20/15
		Chair Date Signature
Returned to CEASN Administrative Assistant	820,5	
Forwarded to Dean for Signatures	826-15	Dean Signature Onolf Repetition 8-26-15
Returned to CEASN Administrative Assistant	826.15	
Forwarded to Professional Education (Unit 8 31-15	Approved Disapproved
		William J. Rugg 10-1-15 Signature Date
Returned to CEASN Administrative Assistant	10-2-15-215	
Forwarded to ACAD Senate	102.15	

COLIDGE DEVISION FORM

	COURSE REVISION FORM
NEW DROPPED	MAJOR REVISION FOR INFORMATION ONLY
College Arts and Sciences Submitter Gary L. Succaw Signature	Program Area Biology General Science Date 8/6/2015 Dean Carol Reifschneider What Land Date 8/6/2015 Signature (indicates "college" level approval)
All chemistry lectures and la with the registrar when apply included in the lecture grade separate classes or all should Organic Chemistry, and Phy	nation & rationale for the proposed revision(s): abs were once separate courses. Several students have had trouble ying for graduation because they were missing a lab credit that was a. The chemistry/physics lectures and labs should be either all d include the lab as part of the lecture. Because General Chemistry, rsics have the labs as separate courses from the lectures, it would in the College Chemistry Lecture and Labs back into separate courses ed.
Please provide the following	
College:	Arts and Sciences
Program Area:	Chemistry
Date:	8/6/2015
Course Prefix & No.:	CHMY 144
Course Title:	College Chemistry II Laboratory
Credits:	2
Required by:	Biology and General Science Majors
Selective in:	None
Elective in:	None
General Education:	Yes
Lecture: Lecture/Lab: Lab only	0%
Gradable Lab:	Yes
Contact hours lecture:	minimal contact primarily for instruction presentation

minimal contact primarily for instruction presentation.

Contact hours lab:

twice a week for a total of four hours for 15 weeks=60 contact

Current Catalog Description (include all prerequisites):

None, the lab is not a separate course from the lecture at present time.

Proposed or New Catalog Description (include all prerequisites):

2 semester credits This laboratory will demonstrate the concepts encountered in College Chemistry II. Prerequisite: High School Algebra. CHMY 143 must be taken concurrently to fulfill a laboratory science requirement, unless CHMY 143 has already been successfully completed.

Course Outcome Objectives:

CHMY 144
College Chemistry II Lab
Upon completing this course, a student will be able to:

Explain the intermolecular attractive forces that determine the properties of the states of matter and phase behavior;

Explain colligative properties and their use in determining characteristics of solutions;

Determine the rate of a reaction and its dependence on concentration, catalysts, nature of reactants, and temperature;

Explain reaction mechanisms and how they relate to rate laws;

Determine whether equilibrium has been established and calculate equilibrium concentrations/pressures;

Demonstrate appropriate use of LeChatelier's principle to predict the effects of concentration, temperature, and pressure changes on equilibrium mixtures;

Apply the principles of equi librium to aqueous systems and perform calculations involving pH and buffer systems;

Explain the principles of, and perform calculations with, the thermodynamic functions of enthalpy, entropy, and free energy;

Balance oxidation/reduction reactions in aci dic and basic solution:

Explain the construction and operation of galvanic and electrolytic electrochemical cells;

Determine standard and non - standard cell potentials;

Learn how to safely and effectively work with chemicals and laboratory apparatus and equipment;

Gather empirical data and analyze this data to gain an understanding of the concepts studied in College Chemistry 2.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

Updated 09/29/05