ACADEMIC SENATE PROPOSAL TRACKING SHEET

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

Proposal # 15-10	Title: College Chemistry II	
(Proposal explanation, submitte	er 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

OFFICE OF THE PROVOST MSU NORTHERN

*****(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 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 Senate Secretary		Copy to Senate President. Forward to Provost.						
*Provost		Abstract Approved						
		☐ Disapproved						
Received by Senate Secretary	10/02/15	Tracking form initiated	Lourdes Caven	10-02-15		Senate	10/05/15	
General Education Committee (if applicable)		☐ Approved ☐ Disapproved						
Curriculum Committee (if applicable)		☐ Approved ☐ Disapproved						
Academic Senate	10/05/15	Approved Disapproved	Topen Sellet	10/13/15		Provost	10-14-15	
Full Faculty (if necessary)		☐ Approved ☐ Disapproved				17.000		
Provost		Approved Disapproved	Elisa O.	Pugar		Chanaller	1.12.16	/
Chancellor		Disapproved Disapproved Disapproved	Sury D. Land	3.17.2016		or do rotton (
MSU		☐ Approved	1 1				ı	
WISO		☐ Disapproved	NLA					
BOR		☐ Approved ☐ Disapproved	NIA					
NWCCU		☐ Approved ☐ Disapproved	NIA					
Provost		Advise originating college and Academic Senate of status. Update Web page.						
Registrar		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)

1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the CEASN Administrative Assistant.

OFFICE OF THE PROVOST

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

	^		
Proposal Number:	Title: COllege	Chemister	11
	Date)
Received by CEASN Administrative Assistant	865		
Forwarded to CEASN College Meet	ing 8 <u>201</u> 5	Approved Approved Chair	Disapproved 8/20/15 Date
Returned to CEASN Administrative Assistant	82015	Signature	
Forwarded to Dean for Signatures	826-15	Dean Signature	Johnson 8-26-15
Returned to CEASN Administrative Assistant	826.15		
Forwarded to Professional Educati	on Unit& 31-15	Approved X	Disapproved
Returned to CEASN Administrative Assistant	10-2-15CB	Signature	Date Date
Forwarded to ACAD Senate	10-2.15		

COURSE REVISION FORM

COURSE KEAISION LOKIM			
NEW DROPPED	MAJOR REVISION_X FOR INFORMATION ONLY		
College Arts and Sciences Submitter Gary L. Succaw Signature	Program Area Biology/General Science Date 8/6/2015 Dean Carol Reitschneider Date 8/6/2015 Signature (indicates "college" level approval)		
All chemistry lectures and lawith the registrar when apply included in the lecture grade. separate classes or all should Organic Chemistry, and Physical Phy	ation & rationale for the proposed revision(s): be were once separate courses. Several students have had trouble ring for graduation because they were missing a lab credit that was The chemistry/physics lectures and labs should be either all include the lab as part of the lecture. Because General Chemistry, sics have the labs as separate courses from the lectures, it would in the College Chemistry Lecture and Labs back into separate courses and.		
Please provide the following College: Program Area: Date: Course Prefix & No.:	information: Arts and Sciences Chemistry 8/6/2015 CHMY 143		
Course Title: Credits:	College Chemistry II 3		
Required by:	Biology and General Science Majors		
Selective in: Elective in: General Education:	None None Yes		
Lecture: Lecture/Lab: No Gradable Lab:	100% No		

Current Catalog Description (include all prerequisites):

Contact hours lecture:

Contact hours lab:

(5 semester credits) An introductory survey of chemistry. This is the second semester of a two-semester sequence. The sequence provides an introduction to the principles of physical and inorganic chemistry appropriate for the level of knowledge necessary for students who plan on majoring in medicine, pharmacy, engineering, or the sciences. A major theme of the course is to introduce students to the chemist's view of the universe, with an emphasis on making connections between the macroscopic and the particulate levels of matter. This course is primarily for science majors and other students planning to take more than one year of chemistry. Includes laboratory. Prerequisite: CHMY 141. This course meets the laboratory science requirement.

three times a week for 15 weeks=45 contact hours

Proposed or New Catalog Description (include all prerequisites):

(3 semester credits) An introductory survey of chemistry. This is the second semester of a two-semester sequence. The sequence provides an introduction to the principles of physical and inorganic chemistry

appropriate for the level of knowledge necessary for students who plan on majoring in medicine, pharmacy, engineering, or the sciences. A major theme of the course is to introduce students to the chemist's view of the universe, with an emphasis on making connections between the macroscopic and the particulate levels of matter. This course is primarily for science majors and other students planning to take more than one year of chemistry. Includes laboratory. Prerequisite: CHMY 141. CHMY 144 must be taken concurrently to fulfill a laboratory science requirement.

Course Outcome Objectives:

CHMY 143

College Chemistry 2

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:

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