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ACADEMIC SENATE PROPOSAL TRACKING SHEET

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

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Proposal # 22-02	Title: Calculus for Technology II	FEB 15 2023
Proposal # 22-02 Title: Calculus for Technology II Proposal explanation, submitter and college dean signatures on attached program/degree or course revision form.)		OFFICE OF THE PROVOST

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.
- 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 submitting college who then notifies the originator.

DocuSign Envelope ID: D4192DE1-344C-46B8-9039-B299A4E01D1E Transmittal Comments/Reason for Sent to Date Signature Date E-mail sent Disapproval *Abstract Copy to Senate received by President. Forward Senate Secretary to Provost. *Provost ☐ Abstract Approved -DocuSigned by: Disapproved 10-05-2 DocuSign dayaku Delra Bradley 0/5/2022 Received by Forward Tracking nar Senate Secretary 022 6500A1E6DE64DB General ☐ Approved Forward DocuSign c. Education -DocuSigned by: Donoven Committee (if 10/12/2022 ☐ Disapproved 10/12/22 Kasthuri Udayakumar applicable) Curriculum -EAE9E3629F544F X Approved Committee (if 10/20/2022 Forward (10/20/22) . Guyant DocuSign ☐ Disapproved Academic Senate Docusign 12/16/2022 forward Valerie Guyant provost ☐ Disapproved Full Faculty (if ☐ Approved necessary) ☐ Disapproved Provost Approved Chance My Disapproved. Chancellor Approved Disapproved MSU ☐ Approved Disapproved BOR ☐ Approved NIA Disapproved **NWCCU** ☐ Approved ☐ Disapproved Provost Advise originating college and Academic Senate of status. Update Web page.

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)

Catalog/Policy

Registrar

COURSE REVISION FORM

NEW DROPPED M	AJOR REVISION FOR INFORMATION ON	LY
	Program Area Math	
	Dean Beth Duvdey Date	

Please provide a brief explanation & rationale for the proposed revision(s): To make the calculus sequence clearer (better content structure and clearer order to courses) and to better match courses in the MUS for ease of transfer

Please provide the following information:

College:

CASE

Program Area:

Mathematics

Date:

3/30/22

Course Prefix & No.:

M 166

Course Title:

Calculus for Technology II

Credits:

Required by:

Engineering Technology: Civil Engineering Technology

Selective in:

General Education:

Lecture:

3 Credits

Lecture/Lab:

1 Credit

Gradable Lab:

Contact hours lecture:

3

Contact hours lab:

2

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):

Calculus with emphasis on problems of interest to engineering technologists. Includes integration, infinite series, and differential equations. Prerequisite: M165 or university placement examination.

Course Outcome Objectives:

- Explain and understand the basic concepts of integrals
- Use integrals to calculate geometric quantities such as areas, volumes, and arc lengths
- Use integrals to calculate physical quantities such as center of mass, fluid pressure, and
- Explain and understand the basics of differential equations, as well as solve simple first-order differential equations
- Apply integrals and differential equations to solve mathematical problems in engineering and physics applications

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

CASE PROPOSAL TRACKING SHEET

(Document to be Originated by the CASE Admin. Associate)

1. Submit all proposals using the appropriate Academic Senate Program/Degree and/or course revision forms to the CASE Admin. Associate

2. The CASE	Admin. As	sociate forw	ards them	to the appropr	iate CASE	Committee	
Proposal Number: #10)	Title: Calculu	s for Techno	logy II			
Received by the CASE Admin Associate	Date:	4/13/202	2				
Forward to the Professional Education Unit	Date:		V. I	Approved _		Not Approved	
		ı	P.E. U. Signa	ature		Date	-
Return to CASE Admim	Date:	3.2012	_				
Forward to the Chair of CASE	Date X-1	3-2002	3 (V	ApprovedChair Signature	e Plan	Approved Date	t-18-202
Return to CASE Admin	Date: 4.	8.202	2				
Forward to the Dean of CASE	Date! 4- 1	8.202	2 B	Approved _ The Dean's Signatu	re J	Not Approved L 4 ~	19-72
Return to CASE Admin	Date:	1920	22				
Forward to Academic Senate Subcommittees	Date: 9	16-20	12				
Updated 12-09-2019 DDB Updated 10/03/2018 DDB Updated 11/23/2020 DDB Updated 04/15/2022 DDB							