

Faculty Senate Agenda  
1/24/2025  
Noon-1 p.m.  
Mill 201

- I. Welcome and minutes: <https://mtech.edu/facultystaff/facultysenate/minutes/2025/minutes-11-22-24.pdf>

**Action Items**

- II. CRC Recommendation – Retitle program Materials Science and Engineering (PhD)

**Informational Items**

- III. Chancellor Search (2/21) - <https://www.mtech.edu/chancellor-search/>
- IV. 2024-25 Merit Awards (Non-MTFA)
- V. AI Writing Detection
- VI. Accessibility Resource (Math) – Webinar and discussion <https://www.youtube.com/watch?v=TWsxKCoS0RA>
- VII. Spring 2025 Senate Schedule - <https://mtech.edu/facultystaff/facultysenate/>

**Discussion Items**

- VIII. Proposed revision to the Excused Absence Policy  
a. Current Policy - <https://catalog.mtech.edu/content.php?catoid=16&navoid=1625#Absences>
- IX. For the Good of the Order

**Protocol:** The department requesting a curriculum change holds a discussion at the departmental level, and if agreed upon, the Department Chair, elevates the request to the Dean for approval. All changes to the catalog require CRC approval.

Final changes are made by the registrar after faculty senate approval and BOR approval, as needed.  
See workflow document

Guidance can be found at: <https://mus.edu/che/arsa/academicproposals.html>

Submission Requirements: All Submissions (checked by CRC):

- Electronic Copy (with the exception of signatures- no handwritten items)
- Completed CRC Form, with all Signatures and Attachments based on level of request (see below)
- Naming Convention as determined by CRC

### **LEVEL of Request**

Please indicate the type of request(s) by selecting *all that apply*:

1. *Faculty Approvals (directly to CRC, then Faculty Senate):*

- Establish a new course for the catalog (please contact the Registrar of MUS CCN information). Required Documents:
  - Course Number
  - Course Outcomes
  - Course Description
  - Syllabus
  - Curriculum Worksheet
  - Pre-requisite or co-requisite
- Course Changes: addition, deletion or change of title, credit, course number, pre-req, description, or cross listing. Required Documents:
  - Course Number
  - Course Outcomes
  - Course Description
  - Syllabus
  - Pre-requisites or co-requisites
  - Existing Curriculum Worksheet
  - New Curriculum Worksheet, with changes highlighted
- Amend an existing degree program. Making changes to programs such as adding a writing course to a major, changing the list of accepted electives or removing a requirement of a minor. Required Documents:
  - Documents as listed under establishing a new course (as applicable)**
  - Existing Curriculum Worksheet
  - New Curriculum Worksheet, with changes highlighted
- Other (for those that are considered in this level but otherwise not listed):

2. *Campus Approvals Level I (must be approved by the VCAA prior to CRC submission):*

- Placing a postsecondary educational program into moratorium: Required Documents:
  - Program Termination and Moratorium Form**
  - Academic Proposal Request Form
- Withdrawing a postsecondary educational program from moratorium. Required Documents:
  - Academic Proposal Request Form

- Establishing, re-titling, terminating or revising a campus certificate of 29 credits or more. Required Documents:
  - Academic Proposal Request Form
  - Documents as listed under establishing a new course (see section 1)**
- Establishing a B.A.S./A.A./A.S. area of study. Required Documents:
  - Academic Proposal Request Form
  - Documents as listed under establishing a new course (see section 1)**
- Offering an existing postsecondary educational program via distance or online delivery. Required Documents:
  - Academic Proposal Request Form

3. OCHE Approvals **Level I** (*must be approved by the VCAA and Chancellor prior to CRC submission*):  
Level I items are those requests for which the Board of Regents has fully designated approval authority to the institution or Commissioner of Higher Education. These requests are to be submitted for notification to or approval by Commissioner as Level I proposals. Level I proposals may be submitted to OCHE at any time by the flagship campuses or community colleges and will be processed on a rolling monthly schedule. The approval of such proposals will be conveyed to the Board of Regents at the next meeting of the board. Level I proposals include campus initiatives typically characterized by minimal costs, clear adherence to approved campus mission, and the absence of significant programmatic impact on other institutions within the MUS and community colleges. BOR Forms can be found using the following link:

<https://mus.edu/che/arsa/Forms/AcademicForms.html>

- Re-titling an existing postsecondary educational program. Required Documents:
  - Academic Proposal Request Form
- Terminating an existing postsecondary educational program.
  - Academic Proposal Request Form
  - Program Termination and Moratorium Form
- Consolidating existing postsecondary educational programs
  - Academic Proposal Request Form
  - Curriculum Proposal Form
  - Documents as listed under establishing a new course (see section 1)**
- Establishing a new minor where there is a major or an option in a major
  - Academic Proposal Request Form
  - Curriculum Proposal Form
  - Documents as listed under establishing a new course (see section 1)**
- Revising a postsecondary educational program
  - Curriculum Proposal Form
  - Academic Proposal Request Form
- Establishing a temporary C.A.S. or A.A.S. degree program Approval limited to 2 years
  - Academic Proposal Request Form
  - Documents as listed under establishing a new course (see section 1)**

4. Level II (*must be approved by the VCAA and Chancellor prior to CRC submission*):  
Level II proposals require initial approval and comment by the Board of Regents through a Request to Plan prior to final review and approval by the Office of the Commissioner of Higher Education. These proposals entail more substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other MUS institutions and community colleges.

- Establishing a new postsecondary educational program

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- Request to Plan (RTP)
- Academic Proposal Request Form
- Curriculum Proposal
- Fiscal Analysis Form
- Completed Intent to Plan Form
- Documents as listed under establishing a new course (see section 1)**
- Permanent authorization for a temporary C.A.S. or A.A.S degree program
  - Academic Proposal Request Form
  - C.A.S/A.A.S Curriculum Proposal
  - Fiscal Analysis Form
  - Completed Intent to Plan Form
  - Documents as listed under establishing a new course (see section 1)**
- Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11
  - Academic Proposal Request Form
  - Documents as listed under establishing a new course (see section 1)**
- Forming, eliminating or consolidating an academic, administrative, or research unit
  - Academic Proposal Request Form
  - Curriculum or Center/Institute Proposal
  - Completed Request to Plan, except when eliminating or consolidating
  - Documents as listed under establishing a new course (see section 1)**
- Re-titling an academic, administrative, or research unit Permanent authorization for a temporary C.A.S. or A.A.S degree program
- Curriculum Proposal
- Completed Intent to Plan Form

**Date** March 25, 2024  
**Dept.** Metallurgical & Materials Engineering      **College** Lance College of Mines & Engineering  
**Program** Materials Science Ph.D. Program      **CRC Representative** Mario Caccia

**Description of Request:** Retitle the program "Materials Science and Engineering"

Montana State University and Montana Technological University jointly wish to retitle the existing program as the "MUS Collaborative Materials Science and Engineering Ph.D. Program."

**Current Course or Program Information:** The current program title is "MUS Collaborative Materials Science Ph.D. Program"

**Number (Assigned By CRC):** \_\_\_\_\_

**Proposed Change**

<u>Course #</u>	<u>Name</u>	<u>Credits</u>	<u>Pre-req.</u>
None. The following paragraph in the course catalog description of the program curriculum will be modified as follows to stipulate at least nine credits of engineering coursework is required:			
Courses. The MUS MatSci Ph.D. will require a minimum of 60 semester credits beyond the bachelor's degree. Of the 60 credits, at least 18 credits must be obtained for dissertation research, and at least 32 credits must be earned for coursework. Up to 24 semester-credits from a master's degree may be accepted toward the minimum degree requirements, but they must be applicable to the MatSci curriculum, and their acceptance is subject to the review and approval of the student's committee and the MatSci program's Leadership Council. At least nine of the elective credits must feature engineering content and skills. No more than 6 credits may be from 400-level courses. To ensure that students benefit from the collaborative, three-campus nature of the program, at least 9 credits must be earned from courses offered away from the home campus. Students are expected to complete the 20-credit core curriculum and pass the qualifying examination within the first year.			
<b>This should include what will appear in the catalog, exactly. New course require course outcomes listed in this area.</b>			

**List of supporting documentation attached (See Level of Request for Requirements):**

**Assessment Leading to Request**

Campus program directors at Montana State University and Montana Technological University have consulted participating faculty, program graduates, and current Ph.D. students. The response on both campuses has overwhelmingly supported the proposed change in program title to the MUS Collaborative Materials Science and Engineering Program.

**Anticipated Impacts to "Other" Programs**

The proposed change will have a negligible effect on most "other" programs except for a modest enrollment increase in 400- and 500-level engineering courses.

**Impact on Library:** MTU Program Director Jerry Downey \_\_\_\_\_ has consulted with Scott Juszkiewicz \_\_\_\_\_ at the Montana Tech library to ensure needed materials and media are available. (Or No consultation is required since changes are only in the course number, course name, or course pre-requisites.)

**Date to take effect (note that the earliest date is the next calendar year):** January 2025

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**APPROVALS**

Department Head Approval

Date 3/22/2024

*Jerome P. Lawrence*

Dean Approval

Date 3/25/24

*April Fuley*

Graduate Council Approval

Date 4/22/2024

*J. Lawrence*

CRC Approval

Date 11/15/24

*Chris Ren*

Faculty Senate Approval

Date \_\_\_\_\_

\_\_\_\_\_

VCAA Approval (see below)

Date \_\_\_\_\_

\_\_\_\_\_

Chancellor Approval (see below)

Date \_\_\_\_\_

\_\_\_\_\_

# Introduction to Accessibility for Mathematics Hub Document

Welcome to the resource hub for the MAA and AMS joint Virtual Program *Introduction to Accessibility for Mathematics* that took place on December 10, 2024. The resources linked below are a combination of recommendations from the presenter and attendee suggestions from the Zoom chat. Please note, these resources are shared for informational purposes only and do not necessarily reflect the official views or endorsements of the MAA or AMS.

## Ximera Demonstration

The [YouTube link for the Ximera demonstration](#) is here! I wanted to say a few more things. Ximera is free to use. To get started, you can visit [the Ximera webpage at Ohio State](#) or the [Github page](#).

Recently, I have started using [HTML](#) for all my TeX files instead of PDF. Honestly, I should have done this years ago, but with how easy Ximera is, I don't have an excuse anymore.

Additionally, Ximera on Github Codespaces allows users to collaborate on TeX files without installation, which is one of its benefits outside of accessibility. (It's one of the benefits of Overleaf, for example). If someone is resistant to making their documents accessible, it helps to suggest a program that has other benefits, and I think Ximera is great for this.

Ximera is still under development, and all accessibility features are planned to be finished by April 2026.

## Handwritten Files

During the FAQ, there was a question about turning handwritten files into an accessible format. I wrote my own program to do this, and here is a [demonstration of its output](#). It's not free to run, since it uses the Cloud; for example, I made a [video demonstration](#) if you want it to run on Discord.

This [YouTube Playlist](#) shows the videos I made before this webinar.

## Chat Resources

- At my institution, we find that communicating with low-vision folks about math is sometimes challenging because we use visual thinking. Anyone have any good resources to address the different experience of folks who don't have easy access to visual thinking?



- The national federation of the blind recommends sharing the tex files for the advanced math since at that stage the PDFs are not accessible but the raw text code can be
- I recommend checking out the DIAGRAM Center for complex images like graphs: [https://diagramcenter.org/table\\_of\\_contents-2.html](https://diagramcenter.org/table_of_contents-2.html)
- We are the authors of two books available in epub with full MathML equations - Make: Calculus and Make: Trigonometry. There are also open source repositories of 3D printable models that illustrate the points in the books. See the epub/pdf versions at [https://www.makershed.com/collections/make\\_author\\_spotlights-joan-horvath-and-rich-cameron](https://www.makershed.com/collections/make_author_spotlights-joan-horvath-and-rich-cameron), or happy to chat - email joan@nonscriptum.com.
- FYI, there is a mailing list about BlindMath: [http://nfbnet.org/mailman/listinfo/blindmath\\_nfbnet.org](http://nfbnet.org/mailman/listinfo/blindmath_nfbnet.org)
- You might find our Make: Calculus book and associated repository of 3D printable models useful.
- For customizable 3D prints for multivariable calculus, this (free) NSF - funded project has some good resources <https://sites.monroecc.edu/multivariablecalculus/>
- We have been creating our accessible books in epub, and there are specialized screenreader (open source Thorium Reader) that will read MathJax, which MathML turns into
- I use html with mathjax for class material over pdfs. Screen readers can handle html files better
  - Do you have sample files that you could share?
  - [https://tyler-skorczewski-math.github.io/math154/calculus2\\_usubstitution.html](https://tyler-skorczewski-math.github.io/math154/calculus2_usubstitution.html)
- Google Slides and Keynote are great options. LaTeXiT (<https://www.chachatelier.fr/latexit/>) can add transparent .png's of equations if your version doesn't have an equation editor. I suspect this is not a good option for accessibility, though. But most of my slides are handwritten, these days!
- One of my colleagues uses annotate (<https://annotate.net/>) as a whiteboard since it seems to work well with creating captions/transcriptions for handwritten notes
- Mathpix and EquatIO have improved a lot in turning handwritten to typeset LaTeX math + MathML. I'd say Mathpix's errors are now "predictable" and I can code around them.
- I have been using Chatgpt to convert some of my equations to LaTeX. Make sure you check and cross check the final product.
- Some points on both sides here: <https://tex.stackexchange.com/questions/510/are-and-preferable-to-dollar-signs-for-math-mode>
- Ximera's main website is here: <https://ximera.osu.edu/>
- If mentioning Ximera, Doenet is part of the same ecosystem (share some designers) ([doenet.org](https://doenet.org)) with strong accessibility as part of the core development.
- This is the video I was thinking of: <https://www.youtube.com/watch?v=Ek2-eL7E4X0>

I've converted LaTeX to PreTeXt and this helps/is a good baseline step. I think it also fits in with better practices for identifying sub/superscripts in math - just little details that seem to pay off.

## Memo

To: Members of the Faculty Senate  
From: Janet Cornish, Adjunct Writing Instructor and Senator *jc*  
Re: Proposal for the Management of Excused Absences  
Date: January 15, 2025

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According to the University handbook, the following activities constitute excused absences:

- “NAIA sanctioned sporting events
- Academic Team competitions (i.e., concrete canoe, steel bridge, human powered vehicle, ethics bowl, environmental design, etc.)
- Travel for professional meetings related to major
- Class field trips”

However, increasingly, the definition of excused absences has been stretched to include sport team practice sessions, week-long visits to meet with alumni and extended field trips. While these activities are valuable, as the number of absences increase, students are missing critical elements of their courses. Often these extended absences can cause hardships for other students as well, particularly when the absences interfere with group projects and presentations. Therefore, I would like to suggest the following policies related to excused absences:

1. Students are responsible for notifying their instructors *prior* to the day or days that will be missed due to an excused absence. Such notification is required if a student wishes to make up any missed work. Coach or Advisor notification is appreciated but does not excuse a student from this responsibility.
2. To the extent possible, a list of known excused absences for the semester should be provided to each instructor for a student engaged in a University sponsored activity or program.
3. The number of excused absences should not exceed *15%* of the total class time for a semester. (suggested percentage)
4. Team practices do not constitute an excused absence.