



MONTANA UNIVERSITY SYSTEM
OFFICE OF THE COMMISSIONER OF HIGHER EDUCATION

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Montana University System Corequisite Design Initiative

March 2017 Update for Board of Regents

Scaling corequisite remediation across the MUS:

Problem Restatement:

- *Most students placed in remedial math and English courses don't go on to complete their college gateway courses. Roughly 1 in 10 students who place in remedial algebra goes on to earn a postsecondary degree or certificate.*
 - *% of students enrolled in remedial math who pass gateway course in 2 years:*
 - *2013 MUS total: 39%*
 - *2013 MUS 2-year total: 30%*
 - *2013 MUS 4-year total: 45%*
- *States such as Georgia, Tennessee, West Virginia, Indiana and Colorado have increased student success in gateway math and English courses from 10-30% to 60-70% by replacing prerequisite remediation with corequisite remediation (a support class offered concurrently with the college level course instead of before it).*
- *Shortened time to degree and greater student success in gateway courses helps with retention and graduation rates.*

Creation of Statewide Corequisite Implementation Steering Committee:

The MUS has committed to scaling corequisite design by Fall 2018 for students who would have normally been placed into remedial math or English courses. In January 2017, the Commissioner appointed a Corequisite Steering Committee comprised of representation from across the MUS and the three community college districts. This steering committee, led by Deputy Commissioner Cech, has been charged with coordinating the statewide effort to implement corequisite design. The Committee held its first meeting on February 25, 2017. A highlight of the meeting was a report out from several campuses which have implemented corequisite design pilots.

The Deputy Commissioner for Academic and Student Affairs will work with the steering committee and associated campuses to develop a timeline for scaling corequisite implementation. This will serve as a baseline for additional efforts working with the campuses to determine resource allocation or reallocation in order to move forward with the scaling.

MONTANA STATE UNIVERSITY ~ Campuses at Billings, Bozeman, Great Falls, and Havre

THE UNIVERSITY OF MONTANA ~ Campuses at Butte, Dillon, Helena, and Missoula

Dawson Community College (Glendive) ~ Flathead Valley Community College (Kalispell) ~ Miles Community College (Miles City)

Montana Corequisite Implementation Steering Committee Membership:

Montana State University & Affiliates

| | | |
|--------------------|-------------------|--------------------------|
| David Singel | Associate Provost | Montana State University |
| David Cherry | Associate Dean | Montana State University |
| Sarah Maki | Assistant Dean | Gallatin College |
| Chairsty Stewart | Math Faculty | MSUB/City College |
| Deb Schaffer | English Faculty | MSUB/City College |
| Charles Pollington | Math Faculty | MSU-Northern |
| Mandy Wright | English Faculty | Great Falls College |
| Ton Oakberg | Math Faculty | Great Falls College |

University of Montana & Affiliates

| | | |
|---------------------|-----------------|------------------|
| Jenny McNulty | Associate Dean | UM-Missoula |
| Clint Reading | Associate Dean | Missoula College |
| Atish Mitra | Math Faculty | Montana Tech |
| Becky Tyler | Math Faculty | Montana Tech |
| Hilary Risser | Stats Faculty | Montana Tech |
| Wai Chan | Math Faculty | Montana Tech |
| Deb Hedeem | Provost | UM-Western |
| Bethany Blankenship | English Faculty | UM-Western |
| Joyce Walborn | Math | Helena College |

Community College Districts

| | | |
|----------------|---------------------------------|-----------------------------------|
| Traci Masau | Workforce Education Coordinator | Dawson Community College |
| Laura VandeKop | Math Faculty | Flathead Valley Community College |
| Mike Hardy | Math Faculty | Miles Community College |
| Sarah Pett | Math Faculty | Miles Community College |

Spotlight on MSU Billings Corequisite Pilot:

Montana State University Billings implemented a corequisite design pilot for M294: Math Support for M105 taught in Fall 2016. The use of the M294 number is temporary. There were two sections offered – one for the face-to-face class taught on the City College Campus, and one for the online class.

The two M105 courses utilized different course materials and as such, the two corequisites covered different background material, while the bulk of both online corequisite class covered study skills. The course enrollment was relatively low. The face-to-face section ended up with 4 students (1 withdrew) and the online with 11 students (2 dropped).

Overall, the courses were a success. Every student who was in the corequisite class end of term passed their target class (M105). Strangely, there were 4 students online who did not pass the support piece, for varying reasons. On average, students who took the support class out performed their M105 only counterparts with one exception. The results from each class are listed below:

| Online Section | Exam 1 | Exam 2 | Exam 3 | Overall |
|----------------|--------|--------|--------|---------|
| M105 Overall | 78.1% | 82.7% | 78.8% | 74.2% |
| M105 Only | 76.8% | 82.3% | 76.0% | 74.5% |
| M294 & M105 | 87.9% | 83.6% | 83.6% | 85.2% |

| Face-to-Face | Exam 1 | Exam 2 | Exam 3 | Exam 4 | Final | Overall |
|--------------|--------|--------|--------|--------|-------|---------|
| M105 Overall | 85.7% | 87.3% | 80.9% | 74.0% | 79.0% | 80.0% |
| M105 Only | 83.7% | 87.8% | 79.0% | 67.7% | 75.6% | 76.7% |
| M105 & M294 | 90.8% | 86.0% | 85.5% | 89.5% | 88.8% | 88.8% |

Highlights from Report-Outs of Campuses to Steering Committee:

The following list contains highlights from the campus' report-outs on 2/24/17. CCA and OCHE are crafting a more in-depth survey to gauge the campus' needs as they continue to scale.

- **MSU/Gallatin College:** Piloting 3 corequisite math courses; enhancing placement and intake processes
- **MSU-Northern:** Piloting M105 with corequisite; rolling out M121 with corequisite Fall 2018
- **Great Falls College MSU:** Proposing to introduce WRIT101 and M105 with corequisites in Fall 2017
- **UM/Missoula College:** Piloting math and English with corequisites in Fall 2017
- **MT Tech/Highlands College:** Currently piloting M121 and writing with corequisites; M105 to follow
- **Helena College UM:** Currently implemented corequisites in math and English; considering expansion
- **UM-Western:** Experience One presents challenges, but shortening prerequisite pathway to M121
- **Dawson CC:** Implementing corequisite WRIT101 in Fall 2017 and math courses in Spring 2018

- **Miles CC:** Piloting condensed prerequisite in writing and math; offering corequisites in Fall 2017
- **Flathead Valley CC:** Implemented shortened prerequisites in math; half of gateway English courses have corequisites

Montana Tech CCA Sponsored Work Session:

On Friday, January 20, 2017, Montana Tech hosted Dr. Bruce Vandal, Senior Vice President for Results from Complete College America who conducted two workshops for both Tech and Highlands College faculty regarding corequisite design. The response was very positive with 43 faculty and staff participating. Some of the outcomes from this workshop included:

- Information regarding design and implementation corequisite remediation was disseminated to a wide audience that included faculty from several disciplines, student support service staff, and administrative personnel
- The impact corequisite math would have on algebra and calculus for engineering students was explored
- The role Highlands College would play in was discussed and ideas regarding how to structure corequisite remediation on the North and South campus were generated
- Broad support for corequisite remediation was demonstrated
- Montana Tech nominated two faculty members to sit on the Math Pathways Taskforce

Spring 2017 CCA Sponsored Corequisite Work Sessions

Complete College America with the assistance of support from the Michael Dell Foundation will assist the MUS with three Corequisite Design work sessions during the week of April 17-21. The sessions will be held on the University of Montana campus in Missoula, Montana State University campus in Bozeman, and Montana State University Billings campus.

The Montana Corequisite Implementation Steering Committee has identified the following topics which will be addressed during these work sessions.

- Impact of corequisite remediation on math and English placement systems
- Best practices for delivering distance and online corequisite remediation
- Measurement and data evaluation of student enrolled in corequisite courses
- Strategies to scale college algebra corequisites
- Training instructors on how to effectively teach corequisite courses

In addition, CCA will work with the MUS to bring in subject experts from other states to provide support and technical assistance.