orientation

MONTANA STATE UNIVERSITY

BOZEMAN · MONTANA

Academic Advising

Microbiology & Cell Biology Department

Who we are

@ agadvising@montana.edu

106 Linfield Hall

Mandi McCarthy-Rogers

Melissa Hill

Patty Kroemer-Spiess

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Additional Contacts

@ mcb@montana.edu

Kari Cargill

Senior Lecturer, Exceptions Manager, and Graduation Certifying Officer

Also evaluates transfer credits for equivalency, advises upperclassmen, and assists students transferring into Microbiology, or minoring in Genetics or Astrobiology.

Margie Berkley

Student Academic Coordinator

Assists students with registering for research credits, adding/dropping MCB courses, and serving as a liaison to advisors.

Loren Gray

MCB Graduate Program Manager, Exceptions Manager, and Graduation Certifying Officer

Also evaluates transfer credits for equivalency, advises upperclassmen, and assists students transferring into Cell Biology & Neuroscience, or minoring in Genetics or Global Health.

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Majors and Concentrations

- Microbiology
  - Microbiology (General)
  - Pre-Medical
  - Pre-Veterinary
  - Environmental Microbiology
  - Medical Lab Science Plans A & B
- Cell Biology
  - Biomedical Sciences
- Biotechnology
  - Microbial Systems
  - Animal Systems
  - Plant Systems (in PSPP Dept)

Health Professions Advising (HPA)

Interested in a pre-health pathway?

- Pre-med
- Pre-dentistry
- Pre-Optometry
- Pre-PA
- Pre-PT
- Pre-OT
- Pre-Chiro
- Pre-AT

Consider attending their session today at 2:45 pm in NAH 165

Pre-Vet Advising

Interested in a pre-vet pathway?

Consider attending their session today
at 2:45 pm in NAH 137

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Writing

If you have AP/Dual Enrollment/Running Start/IB credits,
Please plan to take a US Core for Fall
(wait on taking WRIT)

WRIT 080

Level 100
ACT English/Writing: 0-15
ACT Writing: 3-4
SAT Writing/Language: 10-18
Qualtrics Survey: 0-37 pts

WRIT 011/ WRIT 101W

Level 200
ACT English/Writing: 16-17
ACT Writing: 5-6
SAT Writing/Language: 19-24
Qualtrics Survey: 38-73 pts

WRIT 101W

Level 300
ACT English/Writing: 18+
ACT Writing: 7-10
SAT Writing/Language: 25-37
Qualtrics Survey: 74-111 pts

Exempt from W Core

Level 400
ACT Writing: 11+
ACT English: 28+
SAT Reading/ Writing: 750+
SAT Writing/ Language: 38+
SAT Essay: 22+
AP English Lang/Comp: 4
IB English A, Lang/Lit HL: 3
High School GPA: 3.9 +

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US CORE

- US Core classes include
  - US 101US: First Year Seminar
  - AGED 140US: Leadership Development for Ag
  - COMX 111US: Public Speaking
  - HLD 121US: Leadership Foundations
- Honors College: HONR 201US-Texts & Critics.
  - You only need 1 class to fulfill the US Core
- You will only register for W or US Core – ***one at a time, NOT both in the same semester***

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Math Placement

Why your math placement is important….

- Ensures students register for courses that match their current skill level
- Determines where to start in major when selecting classes
- Helps identify if you're eligible to take Chemistry in your first semester
- Supports timely academic progress by guiding course selection
- Required for all students to register for classes
- Can be established through GPA, test scores, and/or placement exams (like EdReady)

- Not happy with your math placement test score? Please take the EdReady Initial math placement assessment
  - Today: 9:15-12:15 in Roberts Hall or on your own after Orientation.
- Waiting for AP test scores?
  - Register for the math course you have initially placed in. You can change courses once AP scores have been evaluated.
- If you have dual-enrollment transcripts already received by MSU but not factored into your math placement.
  - Work with the math department during registration (Wednesday morning) to register for a higher-level math course.

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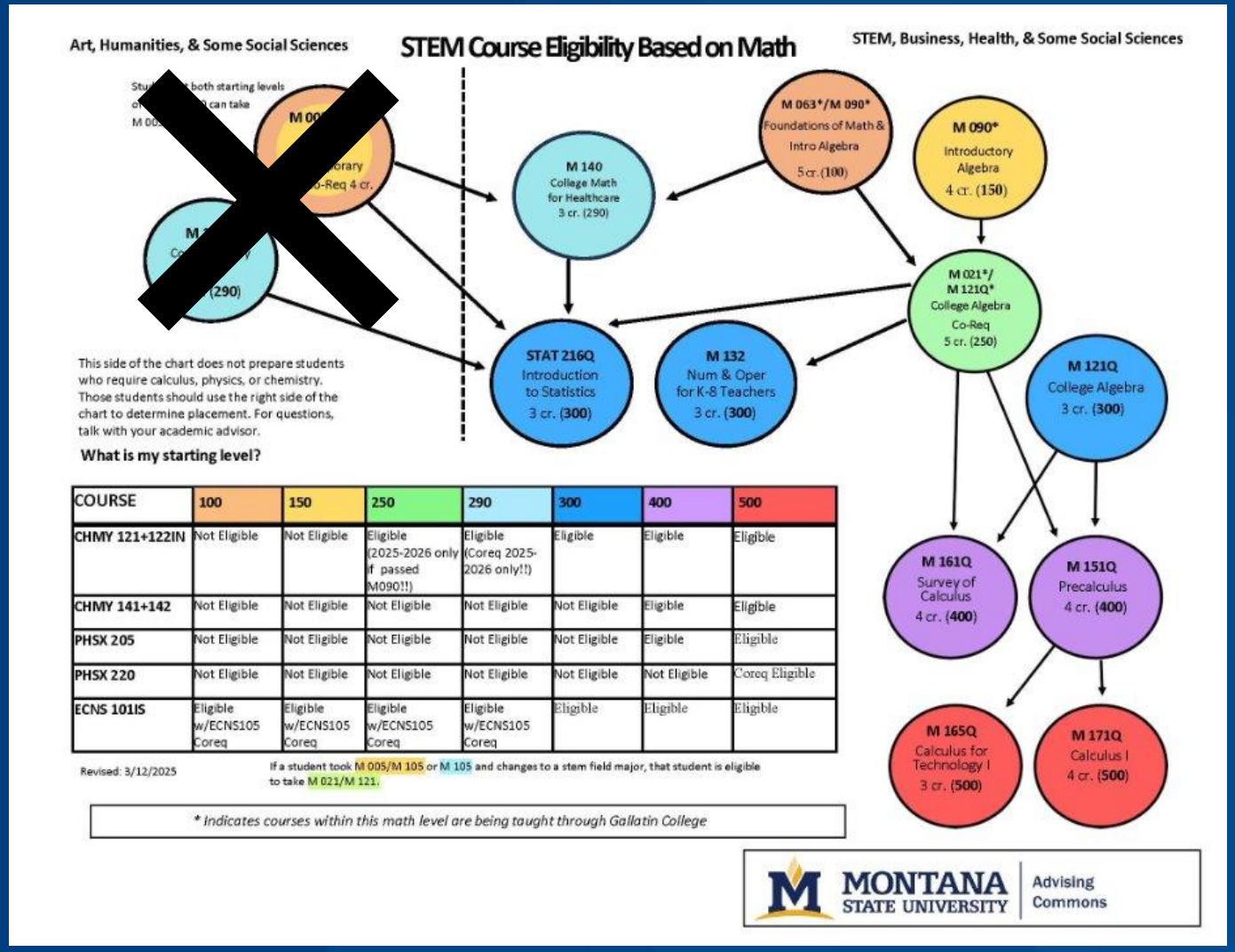
Math Requirements



What is my starting level?

COURSE	100	150	250	290	300	400	500
CHMY 121+122IN	Not Eligible	Not Eligible	Eligible (2025-2026 only if passed M090!!)	Eligible (Coreq 2025-2026 only!!)	Eligible	Eligible	Eligible
CHMY 141+142	Not Eligible	Not Eligible	Not Eligible	Not Eligible	Not Eligible	Eligible	Eligible
PHSX 205	Not Eligible	Not Eligible	Not Eligible	Not Eligible	Not Eligible	Eligible	Eligible
PHSX 220	Not Eligible	Not Eligible	Not Eligible	Not Eligible	Not Eligible	Not Eligible	Coreq Eligible
ECNS 101IS	Eligible w/ECNS105 Coreq	Eligible w/ECNS105 Coreq	Eligible w/ECNS105 Coreq	Eligible w/ECNS105 Coreq	Eligible	Eligible	Eligible

Revised: 3/12/2025

If a student took M 005/M 105 or M 105 and changes to a stem field major, that student is eligible to take M 021/M 121.

** Indicates courses within this math level are being taught through Gallatin College*

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Need to reach 15 credits or want to explore?

- ACT classes (1cr classes)
  - yoga, circuit training, or bowling
- AGSC 101: Introduction to Agricultural and Environmental Resources (1cr Fall only)
  - Introduction to the different Ag. Departments and some study/college skills
- BIOM 101: Careers in Microbiology (1cr, Fall only)
  - Introduction to different careers and pathways within Microbiology
- BIOM 103: Unseen Universe: Microbes (3cr lecture & lab)
  - Beneficial and harmful effects of microorganisms on individual health, public health, food, and water quality are relevant to an informed citizen of the 21st century. Current news topics and historical perspectives are emphasized. Laboratory exercises investigate microbial activity in our everyday world.
- BIOM 250 and 251: Infectious Diseases (3cr lecture/1cr lab (lab optional))
  - Introduces microorganisms and the role of viral, bacterial, fungal, and parasitic infectious agents. The lab teaches practical experience in the growth, ID, and characterization of essential pathogens.
- BIOB 100: Organism Function (3cr Fall only)
  - Examine biological origins and diversity of life. Topics include form, function, adaptation, biomes, photosynthesis, nutrition, immunity, biodiversity, and ecological relationships.
- BIOB 105: Introduction to Biotechnology (3cr Fall only)
  - Introduction to biotechnology as a lecture series
- WILD 201 – Introduction to Fish and Wildlife (3cr Fall only)
  - Introduction to educational and career pathways within fish and wildlife

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First-semester classes based on Math placement

START HERE

Department of Microbiology & Cell Biology		*Target: 15 credits*
Microbiology Major	**Cell Biology & Neuroscience Major**	**Biotechnology Major**
Options (Concentration): ·Microbiology (General) ·Pre-Med ·Pre-Vet ·Environmental Micro ·Medical Lab Sciences (MLS)	*Options (Concentration):* ·Biomedical Sciences	*Options (Concentration):* ·Animal systems ·Microbial Systems
Suggested Major Courses *if math ***level 400 or 500*** * (plan to take all)		
CHMY 141/142 College Chemistry (4 cr)	CHMY 141/142 College Chemistry (4 cr)	CHMY 141/142 College Chemistry (4 cr)
BIOM 101 Careers in Microbiology (1 cr)	BIOB 160 Principles of Living Systems (4cr)	BIOB 105CS Intro to Biotechnology (3 cr)
BIOB 170IN Principle of Biological Diversity (4cr)		BIOB 170IN Principle of Biological Diversity (4cr)
Other Courses (choose one)		
Math Courses *if ***under*** ***level 400*** *		
Level 100 take M 063/M090 ***Level 150*** take M 090 ***Level 250*** take M 021/M121 ***Level 300*** take M 121Q		
Math Courses *if ***level 400 or 500*** * - consider these		
M 161Q Survey of Calculus **OR** M 171Q Calculus I **OR** STAT 216Q Intro to Statistics	M 161Q Survey of Calculus **OR** STAT 216Q intro to Statistics	M 165Q Calculus for Technology **OR** STAT 216Q Intro to Statistics
WRIT (Writing) or US (University Seminar) - (choose one)		
Writing Based on Placement: WRIT 101W College Writing (3 cr) **OR** WRIT 001/101W College Writing with corequisite support (5 cr) **If you are **exempt** from W Core, you may still need to take a writing course for your major; please check with your advisor**		
CORE Courses (optional if needing more credits)		
Humanities (IH) **or** Diversity (D) **or** Arts (IA/RA) **or** Social Sciences (IS/RS) *If Pre-Med suggests:* PSYX 100IS **OR** SOCI 101IS	Humanities (IH) **or** Diversity (D) **or** Arts (IA/RA) **or** Social Sciences (IS/RS) *If Pre-Med suggests:* PSYX 100IS **OR** SOCI 101IS	Humanities (IH) **or** Diversity (D) **or** Arts (IA/RA) **or** Social Sciences (IS/RS)
It is suggested to choose a couple of backup courses in case of full classes or scheduling conflicts		

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Before you leave….

- Have all your questions been answered
- Choose 2-3 specific CORE courses (planned backup classes)
- Have your plan checked by an advisor and take a picture
- Returned your Academic Planning Worksheet
- ***You're all done – you did great!***

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University Core

General Education Requirements

CORE	CODE	COURSE	CREDITS
University Seminar	US	You choose! * unless pre-med or pre-vet then COMX 111US	3
Writing	W	WRIT 101W – College Writing I	3
Quantitative Reasoning	Q	M 161Q or STAT 216Q	3-4
Diversity	D	You choose!	3
Arts	IA/RA	You choose!	3
Humanities	IH/RH	You Choose!	3
Social Sciences	IS	You Choose!	3
Natural Science Inquiry or Natural Science Research	IN/RN	Chemistry and Biology or Physics	3-4
Contemporary Issues in Science	CS	*Covered by multiple IN or other sciences	3
Research	R	Covered by major	3

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