

Welcome to Faculty Senate!

Stephanie McCalla

Faculty Senate Chair

Chemical & Biological Engineering

Rob Maher

Faculty Senate Chair-Elect

Electrical & Computer Engineering

Gentle Reminders

- Faculty Senate is an open and public meeting
- Please, only Senators speak in the meeting, unless you are specifically called on by the Chair or Chair-elect to speak
- Please let others speak; everyone should get a chance to speak before someone else speaks twice.
- Public may address the Senate at end of the meeting during public comment
- Be kind to each other.

Approval of FS Minutes from February 5, 2025

- Do I have a motion to approve? Second?
- Any discussion?
- All those in favor of the motion indicate by saying aye
- Those not in favor of the motion indicate by saying nay
- Any abstaining?

FYI Items

- Office of Research and Economic Development hosting Celebration Research and Creativity, **April 21st, 3:00 p.m.- 5:30 p.m. in Inspiration Hall, Norm Asbjornson Hall**
 - Consider nominating an Everyday Hero of MSU's research enterprise, who will be honored at this event.

FYI Items

- **Legislative week in review:** a resource compiling educationally related happenings in the MT State Legislature:
<https://mus.edu/che/grc/index.html>
 - OCHE has lobbyists in communication with our congressional delegation
- Reminder: Outreach and Engagement Seed grants due April 4, 2025
- Grants that are not funded by indirects are still being accepted.
 - Conference Grants for Distance Education
 - Faculty Excellence Grants (FEG)
 - Instructional Innovation Grants (IIG)
 - Contact cfe@montana.edu

Persistence to Degree (P2D) Course Materials

Faculty Senate

Ryan Anderson

February 19, 2025

Some Stats at MSU:

58% - of students self-reporting that they did not acquire the required textbook due to cost

14% - receiving a poor grade because they could not afford the textbook

13% - dropped or withdrew because they could not complete without the textbook

15% - chose to take fewer courses than planned or did not register for a course they needed due to textbook costs

Coming from OCHE:

No-Cost/Low-Cost NOLO: \$40 or under required costs. This will appear in the catalog. **This includes** all required instructional materials such as textbooks, websites, software programs, apps, courseware packages, access codes to HW websites, etc.

NOLO designation is part of the federal requirement that gives students the right to know course materials costs at the point of registration. It is a method of providing awareness and transparency to students.

Faculty should continue to select materials that work best for them and their students.

Choosing Affordable Textbooks

The choice of Course Materials your students will need, how they access those materials, and their expense can create barriers for students, directly impacting their potential to succeed in class. Consider making your course more affordable, helping your students succeed. Here are three options from least to most effort.

The Big Ask: Take a bit of time and see if one of these options works for you.



Faculty have many options to choose from. It is important to:

- Know your options
- Review the [CFE's Guidelines on Choosing Course Materials](#)
- Ask for help. The Bookstore and the Library are here for you.



Is it in the Library?

Your book, or an older edition, might already be free to students through the Library.

Look it up here:

www.lib.montana.edu

Not there? Ask if they can add it or help you find another option.

[Request today.](#)



Search pages & people



MSU LIBRARY

NEW SEARCH

JOURNALS BY
TITLE

A-Z
DATABASES

GUIDES

INTERLIBRARY
LOAN



Use CatSearch to find library resources



ADVANCED SEARCH



All



Books (Print & Electronic)



Articles



Journals



Images



Videos/Films



Mountains & Minds



LOGIN

NetID:

h93p771

7 characters, starts with a letter (e.g. a11b222)

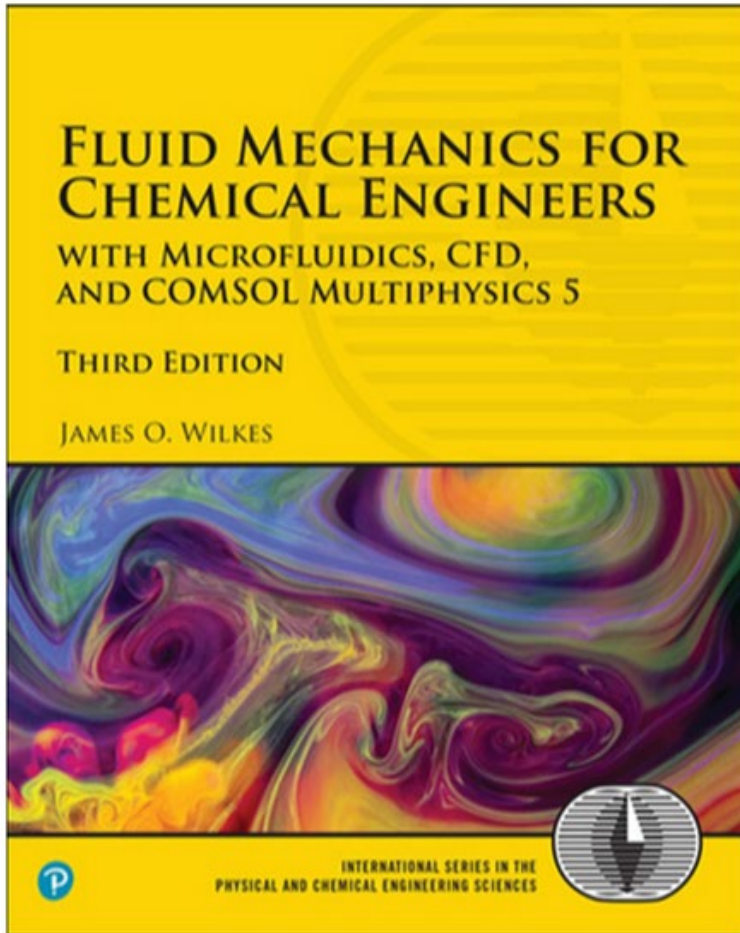
Password:

••••••••

Don't Remember Login

Login

O'REILLY O'Reilly for Higher Education (subscription required)



Start

TIME TO COMPLETE:
22h 16m

LEVEL:
Intermediate to advanced

SKILLS:
Chemical Engineering

PUBLISHED BY:
Pearson

PUBLICATION DATE:
July 2017

PRINT LENGTH:
816 pages

+ Add to playlist

In terms of velocities, for a Newtonian fluid with constant ρ and μ :

$$\begin{aligned}
 & \rho \left(\frac{\partial v_r}{\partial t} + v_r \frac{\partial v_r}{\partial r} + \frac{v_\theta}{r} \frac{\partial v_r}{\partial \theta} - \frac{v_\theta^2}{r} + v_z \frac{\partial v_r}{\partial z} \right) \\
 & = -\frac{\partial p}{\partial r} + \mu \left[\frac{\partial}{\partial r} \left(\frac{1}{r} \frac{\partial (r v_r)}{\partial r} \right) + \frac{1}{r^2} \frac{\partial^2 v_r}{\partial \theta^2} - \frac{2}{r^2} \frac{\partial v_\theta}{\partial \theta} + \frac{\partial^2 v_r}{\partial z^2} \right] + \rho g_r, \\
 & \rho \left(\frac{\partial v_\theta}{\partial t} + v_r \frac{\partial v_\theta}{\partial r} + \frac{v_\theta}{r} \frac{\partial v_\theta}{\partial \theta} + \frac{v_r v_\theta}{r} + v_z \frac{\partial v_\theta}{\partial z} \right) \\
 & = -\frac{1}{r} \frac{\partial p}{\partial \theta} + \mu \left[\frac{\partial}{\partial r} \left(\frac{1}{r} \frac{\partial (r v_\theta)}{\partial r} \right) + \frac{1}{r^2} \frac{\partial^2 v_\theta}{\partial \theta^2} + \frac{2}{r^2} \frac{\partial v_r}{\partial \theta} + \frac{\partial^2 v_\theta}{\partial z^2} \right] + \rho g_\theta, \\
 & \rho \left(\frac{\partial v_z}{\partial t} + v_r \frac{\partial v_z}{\partial r} + \frac{v_\theta}{r} \frac{\partial v_z}{\partial \theta} + v_z \frac{\partial v_z}{\partial z} \right) \\
 & = -\frac{\partial p}{\partial z} + \mu \left[\frac{1}{r} \frac{\partial}{\partial r} \left(r \frac{\partial v_z}{\partial r} \right) + \frac{1}{r^2} \frac{\partial^2 v_z}{\partial \theta^2} + \frac{\partial^2 v_z}{\partial z^2} \right] + \rho g_z.
 \end{aligned}
 \tag{5.75}$$

Get Bookstore Help

The bookstore has options to significantly lower textbook prices for students like older editions, used books, and Inclusive Access content. [Learn More](#). Call or [Email Jay Bachenberg](#) today, x5834.



02

One example: Inclusive Access

Digital textbooks that are immediately available to students via D2L on the first day of courses. Students can “opt-out” of IA materials and are billed for them on the 15th day of classes directly through their student account. Inclusive Access is negotiated on a course-by-course basis and is therefore usually one of the **most affordable** options for students.

Search Topics

Overview

Bookmarks

Course Schedule

Table of Contents

RedShelf Course Materials

Syllabus

HW & Solutions

RedShelf Course Materials

Add dates and restrictions...

Add a description...

Upload / Create

Existing Activities

Bulk Edit

RedShelf Course Materials

External Learning Tool

RedShelf LTI 1.3 Tool

Add a sub-module...



Choose OER

OER are free to students and can be modified to your specific course.

Librarians can help to identify OER texts for you.

Get an [Open Education Grant](#).

Email ask@montana.libanswers.com to get started.



Individuals, teams, and departments/programs may [submit proposals](#) to:

- **Adopt** an existing open textbook (or other educational resource); up to \$1,000
- **Adapt** existing open educational resources to your instructional needs; up to \$2,500
- **Author** a new resource where no appropriate item exists; up to \$5,000.

In FY25 there are two new options for funding:

- Smaller awards may be distributed to fund the **transition to library held materials** that save students money and provide easy, digital access to required content; up to \$800.
- **Secondary awards** may be awarded to instructors for maintenance, revision, further adaptation, or expansion of an OER currently in use; up to \$2000.

Information on Open Educational Resources (OER) and initiatives at MSU.

Overview

Library OER Initiative

Choosing Course Material

Finding OER

Finding OER

Open Textbook Collections

Finding Open Textbooks

Want to Adopt this Guide?

Finding Courses and Ancillaries

Finding Images and Media

Teaching with OER

Diverse Representation

Creative Commons

Copyright

For Students

Accessibility

OER by Discipline

Finding OER



Open education is a vast, diverse, and ever expanding field of higher education. It includes everything from texts, to journals and science publications, to interactive simulations and multi-media. That can be a lot to sift through. The Library is here to help. We've compiled some of the best resources available. To help you get started, check out what [Montana faculty are using](#) or the [highest reviewed texts by Montana CCN](#).

Open Textbook Collections

Open textbooks are free, online learning materials with [Creative Commons](#) licenses. Many of the collections will have links to the same books. If you cannot find what you are looking for or just want some help getting started, let us know! Our faculty are ready to here to support you. [Schedule a time](#) to chat with us about your needs.

What is an Open Textbook? An open textbook is an openly-licensed textbook offered online by its author(s). The open license sets open textbooks apart from traditional textbooks by allowing users to read online, download, or print the book at no additional cost.

An open license allows users:

- to use the textbook without compensating the author
- to copy the textbook, with appropriate credit to the author
- to distribute the textbook non-commercially
- to shift the textbook into another format (such as digital or print)

Many authors also grant rights such as:

- to add, remove or alter content in the textbook, often on the condition that derivative works must have the same license



“My friends and I, we call textbooks the ‘second tuition’, you know the one you have to take out loans for but didn’t know about.” MSU Student

- Tell the bookstore your course text even if you find it in the library
- Some version available for 14 of 35 texts in Chem. & Bio. Eng.
- Consider what an online text experience is like for the students
- Bookstore, library, AYCSS, CFE etc. continue to brainstorm ways to remove financial barriers for students and are here to help you
- Ryan.Anderson@montana.edu

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03 Choose OER
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The Impact of OER: University of Georgia Study

Population	Change in Grade	Change in DFW*
All Students	+8.6%	-2.68%
Non-Pell Eligible	+7.4%	-2%
Pell Eligible	+12.3%	-4.4%
Non-White	+13%	-5%
Part-Time	+28%	-10%
Total Students: 21,822	*DFW= Drop, Fail, Withdraw	

Informational Update: Graduate Council

- Discussion of federal funding uncertainty
 - 444 GRAs, most directly funded from grant budgets, but some number funded via F&A dollars (e.g., startup packages)
- Debby Haynes interested in meeting with department representatives regarding all aspects of the MSU graduate program
- Discussion of having an NTT faculty member (Nursing) serve as a voting member of University Graduate Council
- Policy discussion of "dismissed" vs. "suspended" language, and continuing examination of the appeals policy

Ice Breaker and Discussion

How have the changes to federal programs and funding impacted you?

Undergraduate Courses and Programs

New Courses – First Reading

[ETME 322](#): Introduction to Building Energy Systems

[AGED 222](#): An Introduction to Agritourism

[AHMS 170](#): Intro to Mental Illness and Addiction Behaviors

[AHMS 195](#): Selfcare for Caregivers

[AHMS 202](#): Behavioral Health Clinical Procedures

[BIOH 365](#): Human Anatomy and Physiology I for Health Professions

[BIOH 366](#): Human Anatomy and Physiology I for Health Professions Lab

New Courses – First Reading

[BIOH 370](#): Human Anatomy and Physiology II for Health Professions

[BIOH 371](#): Human Anatomy and Physiology II for Health Professions Lab

[EGEN 110US](#): Foundations in Engineering & Computing Mindset

[GDSN 365](#): Professional Development & Practice

[GEO 402](#): Molecular Paleontology

[HSTA 300](#): Writing for History

[SPNS 334](#): Women Writers of Latin America

New Courses – Second Reading

[CJLE 105](#): Police Patrol Procedures

[CJLE 106](#): Basic Police Firearms Training

[CJLE 130](#): Practical Scenarios for Law Enforcement

[CJLE 140](#): Patrol Operations

[CJLE 150](#): Life Saving Skills

[CJLE 160](#): Communications for Public Safety

New Courses – Second Reading

[CJLE 170](#): Montana Criminal Code

[CJLE 180](#): Health and Wellness in Everyday Policing

[CJLE 209](#): Criminal Investigation

[CJLE 212](#): Defensive Tactics

[CJLE 298](#): Internship

[CJUS 231](#): Criminal Evidence and Procedure

Course Changes – First Reading

COMX 101US: First-Year Experience: Place and Identity

1. Rubric change from US
2. Title change from US 101US: First Year Seminar

HDFS 315: Communication and Marketing in Community Education

1. All new learning outcomes

Program Changes – First Reading

[HMHR-BS](#): BS in Hospitality Management: Sustainable Hospitality

1. BS in Hospitality Management

[HMLM-BS](#): BS in Hospitality Management: Hospitality Business Option

1. Not a new program. Option existed in the original program.

[SCNS-MED](#): School Counseling

1. Adding an online option

Graduate Courses and Programs

Course Changes – First Reading

CSCI 547: Advanced Machine Learning

1. Title change from Machine Learning
2. The title change is to disambiguate this course from CSCI 447 that has the same title (Machine Learning).

FILM 575: Special Professional Project and Paper

1. Number change to 575 as that is the number for Professional Project/Paper
2. Title change to reflect Project and Paper

Course Inactivations – First Reading

[BIOH 542](#): Survey of Current Cell Signaling

1. Instructor no longer at MSU

[HDCO 523](#): Theory and Practice of Addiction

1. Duplicative with AC 501

[HDCO 556](#): Sexuality Counseling

1. Course is no longer needed due to accreditation standards

[HDCO 590](#): Master's Thesis

1. Counseling is a clinical program so doesn't offer thesis options

Course Inactivations – First Reading

[IMID 501](#): Exper Immunology/Pathology

1.Course no longer offered

[IMID 505](#): Gene Regulation in Human Development, Disease, and Immunity

1.Course no longer offered

[IMID 589](#): Graduate Consultation

1.Not needed for programs in MCB

[IMID 590](#): Master's Thesis

1.IMID grad program no longer offered

[IMID 690](#): Doctoral Thesis

1.IMID grad program no longer offered

[MB 535](#): Genomic Analysis Lab

1.Course no longer offered

Program Changes – First Reading

CRBT CERT: Professional Certificate in Crop Breeding and Biotechnology

1. Title change from Certificate in Crop Breeding and Biotechnology

FYI Notification

[SCNS-MED](#): School Counseling
1. Adding an online option

Senate Open Discussion

Public Comment

(Two minutes per person)

Do I have a motion to adjourn?
Second?