FIG-MLA Learning Assistant Handbook

FIG-MLA Program

Goals

The goals of the FIG-MLA program are to

- improve the quality of undergraduate STEM education,
- promote and support evidence-based teaching,
- help STEM majors build career-relevant teaching and communication skills, and
- encourage institutional change at all levels of STEM teaching.

Expectations

MLAs
- Commit prior to the start of the semester to the MLA position offered.
- Communicate with program staff and instructors in a timely and professional manner.
- Work the hours expected.
- Enter time worked into MaineStreet each week.
- Communicate with program staff and instructors ahead of time for any late arrivals to or absences from meetings and/or classes.
- Be an ambassador of the FIG-MLA program and assist instructors with recruitment.
- Complete any surveys that are asked of MLAs, or communicate with program staff if you wish to opt out.

FIG-MLA Program Staff
- Communicate with FIG-MLA instructors and MLAs in a timely and professional manner.
- Provide support and guidance to instructors and MLAs whenever needed.
- Applications online and announcements sent across campus for recruitment of each semester's MLAs.
- Hiring paperwork for all MLAs each semester, regardless of cost structure.
- Weekly hour approvals of MLAs in MaineStreet and communications with MLAs about entering hours, questions, etc.
- Administer pre- and post-surveys for program evaluation as well as any other surveys FIG-MLA instructors have determined useful for their assessment plan and measuring impacts.

FIG-MLA Instructors
- Communicate with program staff and MLAs in a timely and professional manner.
- Implement course modifications and instructional changes described in the

awarded proposal.

- Hold weekly preparation and coordination meetings with MLAs (this may be combined with regular weekly meetings with graduate student teaching assistants (TAs), if applicable).
- Ensure that no MLAs are grading student work or meeting one-on-one with students.
- Develop and implement the proposed assessment plan for measuring impacts of instructional changes on student learning.
- Administer pre- and post-semester surveys for program evaluation from the RiSE Center. (We gather these data for program evaluation purposes and not as an evaluation of individual instructors or individual projects.)
- Attend meetings with other instructors in the program to discuss project plans, assessment design, data analysis, challenges, successes, *etc.* (there will be at least one meeting per semester).
- Prepare a brief project report annually, which might be shared with the campus community.
- Recruit undergraduate students for MLA positions
- Interview and select undergraduate students for MLA positions and communicate selections with program staff by the deadline provided by program staff.

Important Contacts

You may have questions as you start to navigate being an MLA. Here are some useful contacts and some reminders to help you on your path.

Questions about entering hours, employment, work study, etc…..

Student Employment

Website: https://umaine.edu/studemp/

Phone: 207.581.1349

Email contact: student.employ@maine.edu

Questions about pay, hour approval, payroll schedule, etc…..

Payroll

Website: https://www.maine.edu/human-resources/human-resources/payroll-contacts/

Phone: 207.581.9104

Email contact: payroll@maine.edu

Questions about the MLA Seminar and related assignments, MLA program, etc.…..

Instructors

Torey Bower: torey.bowser@maine.edu

Academic Requirements

In order to be considered a student employee, you must be enrolled or accepted in a degree-granting or certificate program AND be enrolled at least half time (6 credits or more).

Training

AY UMaine Training

As a student employee, you are required to take online training. These trainings must be completed **within 30 days of hire** for new students and must be completed annually for returning students. For more information about the compliance training and where to find it, check out the Student Employment website [here](https://umaine.edu/studemp/students/training/). (https://umaine.edu/studemp/students/training/)

Training Modules

1. FERPA
2. Basic Safety
3. Information Security
4. Conflicts of Interest
5. Sexual Harassment Prevention
6. UMS ICT Accessibility Awareness
7. Title IX

Demonstrating Completion: Please submit the Pathway Transcript once you have completed the entire Compliance Training Pathway. You can find a copy of this transcript by selecting the drop down menu next to your name in the upper right hand corner of the screen. Select 'Accomplishments'. Then from the Accomplishments page select the 'Pathway Transcripts' tab.

If you have completed your training, you should see UMS Compliance Pathway for Employees and Student Employees AY 2022-2023. You can now select this and download a copy of the pathway transcript.

*Important note, in order to complete each training course, you must play ALL videos and view/download all documents included in the course. You CANNOT just complete the quiz in the "ProveIt" section.

Use the google form linked below to submit your Pathway Transcript. You must be signed into your @maine.edu account to access this form. Please complete this form before our next class.

https://docs.google.com/forms/d/e/1FAIpQLSdaFIz4y3lUI02Riy3lxshTuhJppFUvSnT7L4j10qyHISNbLw/viewform?usp=sf_link

Mandatory Reporting

In part of the mandatory training, all University employees are 'mandatory reporters'. All university faculty, staff, student employees, and volunteers have a duty to report incidents of sexual discrimination, sexual harassment, and sexual assault involving members of the university community that they witness or which are disclosed to them. Because domestic violence, dating violence, stalking, and sexual misconduct can also constitute sex discrimination, information received by university employees about such incidents must also be reported. **Student employees**, peer advocates, and volunteers who learn of a violation of UMaine's Sex Discrimination Policy in the course of their employment, programming, or volunteer responsibilities also are required to report.

For more information on mandatory reporting, what it entails, and who to contact, check out the UMaine Mandatory Reporting Guidelines webpage. You can also reach out to the FIG-MLA program coordinator, Torey Bowser, or the Office of Equal Opportunity at UMaine.

New MLA Seminar Series

In addition to the University required training all new MLAs must attend the RiSE MLA seminar. This is a weekly meeting for new MLAs where we discuss different aspects of being a peer mentor and go over skills that can help you in the classroom. These seminars are Wednesdays from 12-1pm and 5-6pm during the semester. Students who cannot attend at least one of those sections are not eligible to be new MLAs.

Each semester we try to cover topics that are relevant to our MLAs and may change topics based on feedback we receive at the end of the semester. Here is the list of topics from Fall 2023 with a brief summary.

MLA Professional Learning Topics

- **Asking Questions to Help Students**
- **Active Learning Strategies**
- **Dealing with Difficult Topics**
- **Engaging Students - Talk Moves**
- **Mindset**
- **Metacognition**
- **Why Students Leave STEM**
- **Diversity, Equity, and Inclusion**
- **MLA Balancing Act**

New MLA Seminar Series

The new MLA seminar course is designed to introduce MLAs to STEM education research, pedagogy, and methods to help students engage in active learning.

- **Every new MLA must take the required seminar course or is INELIGIBLE FOR HIRE**
- **Seminar is held weekly Wednesdays from 12-1pm and 5-6pm during the semester**

Forms and Documents

I-9

The Federal I-9 Form is the official Employment Eligibility Verification document. ***Please complete the first portion of the electronic I-9 on MaineStreet before going to the office to verify your documents.***

Who needs to complete this document?

- All new, first-time employees of the University of Maine
- Students who have not worked for the University in the past 12 months

Students needing to complete the Federal I-9 Form must provide official documents proving identity and employment authorization. For a complete list of acceptable documentation, check the **list of acceptable documents**, also located on page nine of the Federal I-9 Form.

The Federal I-9 Form MUST be completed <u>within 3 business days</u> of the student's first day of employment. If an I-9 is not completed for a student within 3 business days of beginning work, they will be required to STOP working until all required paperwork is completed. Reminders for those missing paperwork will be sent to both the supervisor and newly hired student.

International Students

International students may be required to fill out additional paperwork. Contact student employment to see what steps you may need to take. You cannot get paid until all your paperwork has been completed.

Direct Deposit

All new, first-time student employees and student employees who have not worked for the University in the past 12 months must enroll in Payroll Direct Deposit. Direct deposit is mandatory for all student employees. Students should enroll in Payroll Direct Deposit on MaineStreet.

Click here for instructions on how to enroll in Payroll Direct Deposit.

Important: Students will not have access to enroll in Direct Deposit until their required I-9 form and Authorization form have been completed, submitted to Student Employment, and processed. Once your information has been entered, direct deposit can take up to two full pay cycles to fully process. Wondering if your direct deposit has gone through? You can contact the Payroll office at (207) 581-9104!

Pay and Entering Hours

MaineStreet

As a student employee, you'll be entering time in MaineStreet — the same system you use to view and edit your student information. Work hours are recorded on the Timesheet. For instructions on logging in to MaineStreet, refer to the documentation at: https://umaine.edu/stuaid/navigating-mainestreet/ or visit the UMaine portal: https://umaine.edu/portal/

For instructions on how to enter hours, follow the steps listed here.

If you have further questions, please contact the FIG-MLA program coordinator (Torey Bowser, torey.bowser@maine.edu), UMaine Payroll, or Student Employment Services.

Hour Approval

Before you can get paid, all of your hours must be approved by your supervisor. For MLAs approval will be completed the Monday following the end of a pay period. All hours submitted by MLAs must be manually approved and recorded. To ensure that your hours are approved on time so you can get paid, enter all hours for the pay period by Sunday at midnight. Keep in mind that mainestreet does not automatically update and any changes to your timesheet will take time to process for your supervisor to see.

Weekly Teaching Team Meetings

These weekly meetings are an opportunity for faculty and MLAs to review previous classes and explore what will happen in the next class. This is usually the time when MLAs go over any questions or clarifications they may need about the content being covered or if they feel a topic may need a different approach for students to understand.

During the weekly preparation sessions LAs participate in the following activities:
- Review content knowledge;
- Role play through inquiry-based instruction and modeling of inquiry-based instruction;
- Reflect and discuss student learning and student understanding;
- Co-think through in-course modifications and curriculum development;
- Discuss pedagogical content knowledge;
- Discuss effective interpersonal interactions

Best practices for setting up your weekly preparation session with your faculty member:
- Dedicate a set time each week for the weekly preparation session;
- Try to dedicate at least an hour to these sessions;
- Ask if there is a plan for each session: Will it focus on content understanding? Will it include time to reflect on student understanding? Are there opportunities to work with an LA or team of LAs to develop an activity for the class?

How to make the most of being an MLA

MLA Do's and Don'ts

DO	DON'T
Co-design meaningful learning activities	Grade assignments
Co-facilitate active small-group learning during class time	Proctor exams
Model and promote effective learning strategies	Teach initial course content
Model how to use resources and "get unstuck"	Meet one-on-one with students outside of class
Provide feedback to faculty	Serve as the students' 24/7 resource

Advice from past MLAs

Ask questions.	Be confident in yourself! You deserve to be where you are.	Ask about majors!
You don't have to be nervous when talking to students. They are around the same age as you and you will come to realize that some of them are really chill and nice.	Share with the students' strategies you used to pass the class, as well as give them the right questions to ask the professor to succeed	Learn what is within your control. Sometimes other people's decisions/attitudes are not your responsibility.
Advocate for yourself and your needs as an MLA, student, and human.	You can say you don't know the answer! No one will be mad at you for it!	Prioritize time off for yourself as much as you prioritize schoolwork.
Try and brainstorm the questions students might ask and think about how you might explain it to them	students may get mad/frustrated at you sometimes, don't take it personally.	Talk with other MLA's if you start to feel overwhelmed! They're probably feeling the same way.
It is okay to also have a student explain a concept to their peers. Help them form connections with each other, maybe they'll make a study group!	If students don't want to engage with you that's okay, they just might not be comfortable with you or the material yet.	If you made a mistake or gave a student wrong information for a question, don't be afraid to go back and say you were wrong and re-explain the answer.

You might not be able to engage with students as much as you hoped, don't be discouraged if they aren't approaching you with questions.	The professors are in this with you. You should use them as a resource but also speak up if they aren't being fair to you as an MLA. The MLA program has guidelines for a reason	Hold review sessions, without the professor there. It allows for students to ask questions that they might be too scared to ask in front of the professor.
Get to know the TA's you work with if you have any. They're cool people with a lot of content knowledge they're probably dying to tell someone about. They can also provide a lot of insight about how to teach, or how to work in recitations.	Remind them that they you are a student too! Engage with them and take interest in how they are doing. You can normally find some common ground and that will make it easier to assist in active learning clusters.	You may come across the situation where students you are MLAing for in one class are classmates alongside you in another! Being an MLA is a unique but amazing position.
Let students know that even you struggle with certain concepts / problems sometimes. It builds trust and empathy, and it empowers students to know that they can still succeed in the course even if they don't know something front-to-back, back-to-front.	The professors you are working with care about your opinion! Don't be afraid to speak up because you have a student perspective! You are an active part of a teaching team, and you can use this to make a difference for the students you are working with!!	Include some fun, low-key activities. Suggest that the students in your help session collaborate with you in making a class soundtrack for studying, or find other creative ways to foster a positive, fun learning environment.
You can make a difference - if you have a suspicion that a student's mental health is impacting their ability to learn, consider reaching out or directing the instructor to reach out.	Try to be mindful of the types of questions you're asking (open vs. closed). (Though it's worth remembering that one isn't necessarily better than the other, context is important).	Take student corrections in stride and consider complementing them! This is a wonderful indication that they're listening, learning, and engaging with you.

If students are having discussions with each other and sound like they are confused, don't be afraid to cut in and ask if they have a question	Try harder to engage with students during first two weeks. Then they are more willing to ask questions in future	Having students walk through the steps of their problem-solving process is a great way to have them catch their own mistakes.
It is better to admit you don't know rather than help and explain something incorrectly.	Be goofy and funny; it makes learning more enjoyable and your explanations more memorable.	Manage your time and do not save everything until the last minute!
	You can't help a student who can't help themselves. You as an MLA can only do so much to help someone, the student must also put in the effort.	Don't be afraid to tell students to ask the professor for a more specific answers or for further clarification
You won't get everyone to talk and that's okay. Especially in zoom calls, you can only do what you can do!	Some weeks will go more smoothly than the others but do not let that discourage you!	Keep up with the material students are learning. It'll help you be more confident when helping them.
it's okay to learn from the students if you don't know something	You are an advocate for the students with a more direct connection to the professor.	Try to be very calm with your approach. New ideas are always welcome
Work towards directing students' train of thought. Do your best to get as many people engaged as possible.	Try to figure out different ways you could explain a topic, and don't feel silly for putting it in much simpler terms	Figure out what it is about a particular concept that excites or interests you and grow a conversation from there!
Work through problems, don't just give answers.	Take breaks when you need them.	Try to fit naps in if you can, they could save you!

Appendices

Appendix A: RiSE Center

The MAINE CENTER FOR RESEARCH IN STEM EDUCATION (RiSE Center) conducts research into education at all levels of instruction within the disciplines of science, technology, engineering and mathematics (the STEM disciplines). We also work to integrate education research into STEM teaching and learning through our many programs, projects, and partnerships.

Since its formation in 2001, the RiSE Center has hosted conferences annually focused on integrating STEM education research and practice. This integration is a significant part of many of the Center's initiatives, including the Maine STEM Partnership, a state-wide preK–16+ STEM education improvement community with 160 Maine schools, 100 school districts, 700 teachers, 29,000 students, and over 30 University of Maine faculty members.

The Faculty Incentive course modification Grant - Maine Learning Assistant program (FIG-MLA) is housed within the RiSE Center and focuses on college level STEM education.

Maine Learning Assistants are undergraduate students who return to classrooms as near peer mentors. MLAs are more approachable and relatable for students currently enrolled in the course. MLAs can also more easily identify where students are struggling and can help faculty understand where students are at in their comprehension of course material.

RiSE Center

The Research in STEM Education Center (RiSE center) works on STEM education research and implementing this research into STEM classrooms at UMaine
- The Faculty Incentive course modification Grant - Maine Learning Assistant program (FIG-MLA Program is run by the RiSE center
- The RiSE center works in conjunction with the STEM specific education improvement community called Maine STEM Partnership

Appendix B: FIG-MLA Program Background

The FIG-MLA Program aims to strengthen instruction and learning outcomes in undergraduate science, technology, engineering, and mathematics (STEM) courses. The

FIG-MLA program is modeled after the [highly successful program](#) developed at the University of Colorado Boulder. The program is a part of the [Learning Assistant Alliance](#), an international collaboration with over 550 member institutions. The program began in 2012 under a large grant awarded to the RiSE Center through the National Science Foundation's Math and Science Partnership program. Currently, there are 31 instructors with 33 courses in 15 departments participating in the FIG-MLA program. In addition, over 550 undergraduate students have been hired as MLAs.

STEM instructors submit grant proposals for modifying a course to include more evidence-based and student-centered teaching strategies, such as the use of clicker questions, collaborative group work, think-pair-share, and others. Proposals include the use of undergraduate Maine Learning Assistants (MLAs) in the class to help instructors implement course modifications.

A virtual poster session was held at the June 2021 RiSE Conference in which STEM instructors presented posters about their course modifications and impacts. Please feel free to take a look at posters from the [2021 RiSE Conference Faculty Poster Session](#).

MLAs serve as peer instructors, facilitating group work and assisting faculty as they transform their course to incorporate more interactive-engagement and student-centered instruction. MLAs learn to use innovative, research-based instructional strategies, develop relevant pedagogical skills, deepen their content understanding, and have the opportunity to explore their interest in STEM teaching, while participating in a vibrant community of peers and faculty.

Click here for the [Portfolio of 2019-2020 FIG-MLA Courses](#).

Appendix C: List of Current FIG-MLA Courses

Instructors	Courses
Francois Amar	CHY 131 Chemistry for Civil, Electrical and Mechanical Engineers
Edward Bernard	BMB 221 Organic Chemistry BMB 300 General Microbiology
Timothy Boester	MAT 122 Pre-Calculus
Kristina Cammen	SMS 308 Ecology and Conservation of Marine Mammals

Ana Chatenever	CHY 121 General Chemistry I
	CHY 122 General Chemistry II
Barbara Cole	CHY 121 General Chemistry I
Farahad Dastoor	BIO 100 Basic Biology
	BIO 200 Biology of Organisms
Alice Doughty	ERS 101 Introduction to Earth Sciences
Paula Drewniany	MAT 122 Pre-Calculus
	MAT 127 Calculus II
Chris Dufour	COS 250 Discrete Structures
Saima Farooq	PHY 121 Physics for Engineers and Physical Scientists I
	PHY 122 Physics for Engineers and Physical Scientists II
Todd Gabe	ECO 120 Microeconomics
Laura Gurney	COS 125 Introduction to Problem Solving Using Computer Programming
Meredith Kirkmann	CET 326 Soil Mechanics and Foundations
Sarah Lindahl	CHY 121 General Chemistry I
	CHY 122 General Chemistry II
Sara Lindsay	SMS 201 Marine Organisms
Natalie Machamer	CHY 251 Organic Chemistry I
	CHY 252 Organic Chemistry II
Jean MacRae	CIE 331 Fundamentals of Environmental Engineering
Ayesha Maliwal	MAT 116 Introduction to Calculus
Julia McGuire	BIO 100 Basic Biology
	BIO 200 Biology of Organisms
Jennifer Newell-Caito	BMB 207 Fundamentals of Chemistry
	BMB 208 Elementals of Physiological Chemistry
Paul Rawson	SMS 300 Marine Ecology

Penny Rheingans	COS 125 Introduction to Problem Solving Using Computer Programming
Katharine Ruskin	EES 100 Human Population and the Global Environment
Naeem Shahid	PHY 121 Physics for Engineers and Physical Scientists I
MacKenzie Stetzer	PHY 236 Introductory Quantum Physics PHY 262 Electronics
Roy Turner	COS 140 Foundations of Computer Science
Liping Yu	PHY 241 Computational Physics