



Job Descriptions and Hiring Practices

Spring 2026 ULAs

Mathematics

LB117 Functions and Trigonometry

Job Description:

Lead weekly recitation, staff the math help room, assist with grading, attend weekly meeting.

Hour-by-hour breakdown per week:

- Lead recitation: 1 hour
- Staff math help room: 2 hours
- Grading: 1 hour
- Weekly meeting: 1 hour

How hiring decisions are made:

Must have completed LB 118 or higher. Important positive factors in hiring decisions include high grades (3.0 or higher in all relevant mathematics courses), previous experience as a ULA or tutor, interest in the teaching profession, declared as math major or minor or a related major/minor in the mathematical sciences, strong references from LBC mathematics instructors, available to staff time slots that need to be filled, strong responses to application prompts.



LB118 Calculus I

Job Description:

Lead weekly recitation, staff the math help room, assist with grading, attend weekly meeting.

Hour-by-hour breakdown per week:

- Lead recitation: 1 hour
- Staff math help room: 2 hours
- Grading: 1 hour
- Weekly meeting: 1 hour

How hiring decisions are made:

Must have completed LB 119 or higher. Important positive factors in hiring decisions include high grades (3.0 or higher in all relevant mathematics courses), previous experience as a ULA or tutor, interest in the teaching profession, declared as math major or minor or a related major/minor in the mathematical sciences, strong references from LBC mathematics instructors, available to staff time slots that need to be filled, strong responses to application prompts.

LB119 Calculus II

Job Description:

Lead weekly recitation, staff the math help room, assist with grading, attend weekly meeting.

Hour-by-hour breakdown per week:

- Lead recitation: 1 hour
- Staff math help room: 2 hours
- Grading: 1 hour
- Weekly meeting: 1 hour

How hiring decisions are made:

Must have completed LB 220 or higher. Important positive factors in hiring decisions include high grades (3.0 or higher in all relevant mathematics courses), previous experience as a ULA or tutor, interest in the teaching profession, declared as math major or minor or a related major/minor in the mathematical sciences, strong references from LBC mathematics instructors, available to staff time slots that need to be filled, strong responses to application prompts.



LB220 Calculus III

Job Description:

Lead weekly recitation, staff the math help room, assist with grading, attend weekly meeting.

Hour-by-hour breakdown per week:

- Lead recitation: 1 hour
- Staff math help room: 2 hours
- Grading: 1 hour
- Weekly meeting: 1 hour

How hiring decisions are made:

Must have completed MTH 235 or MTH 299 or higher. Important positive factors in hiring decisions include high grades (3.0 or higher in all relevant mathematics courses), previous experience as a ULA or tutor, interest in the teaching profession, declared as math major or minor or a related major/minor in the mathematical sciences, strong references from LBC mathematics instructors, available to staff time slots that need to be filled, strong responses to application prompts.

STT231 Statistics for Scientists

Job Description:

Lead weekly recitations, grade peer writing assignments, assist in grading exams and homework,, hold office hours and review sessions before exams.

Hour-by-hour breakdown per week:

- Lead recitation: 1 hour
- Staff math help room: 2 hours
- Grading: 1 hour
- Weekly meeting: 1 hour

How hiring decisions are made:

Must have completed at least one stats course beyond STT 231. Experience working in the statistical learning center and/or familiarity with core statistical tests such as the chi-square tests, ANOVA and inference for linear regression is considered.



Biology

LB144 Organismal Biology & LB145 Cellular and Molecular Biology

How hiring decisions are made

Hiring Process Qualifications for student applying to be a Biology Undergraduate Learning Assistant (ULA) at LBC

Minimal requirements for application to be a LBC Biology ULA.

- Students must have a MSU GPA of 2.75 or higher
- Students must have completed both LB144 and LB145 before starting as LA.
- Applicants best qualified to serve as LAs for LB144 and 145 are students who completed both courses and did well in both courses. Doing well in *both* is desired (averaged GPA 3.0 from two courses or higher).
- Applicants must be able to work 10 hrs/week and willing to serve as LA for both LB144 and LB145.

Biology ULA Interview process

- 15-week interview#1: Qualified applicants were observed while enrolled as a student in Biology 1 (LB144) both in lecture and lab by their instructors. Those that exhibited understanding of topics, and good social skills working with/mentoring others, were noted by faculty and staff of the course.
- 15-week interview#2: As you might predict, once again, qualified applicants were observed while enrolled as a student in Biology 2 (LB145) both in lecture and lab by their instructors. Those that again exhibited understanding of topics, and good social skills working with/mentoring others, are noted by faculty and staff of the course and some are recruited to apply to be a Biology LA.

Biology ULA selection criteria/qualifications used to select the best applicants

- A high MSU GPA, and strong grades in LB144 and 145 are good, but other qualifications are equally important.
- Returning experienced LA's, who have done well in the position, are given priority for rehire.
- Students who are currently Lyman Briggs majors get priority over those who are not.
- Students who will be living in Holmes Hall tend to get priority over those living off-campus.
- A confidence and comfort with terminology and laboratory experiments is very important for both Lab and Lecture LAs.
- A confidence and comfort working with other students; slowly and patiently giving them support, is extremely desirable for both Lab and Lecture LAs.
- Demonstrating comfort and confidence with laboratory tools, with scientific thinking, in particular with helping others learn biology are important qualifications for being for both Lab and Lecture LAs.
- Lab LAs for biology ideally are applicants who did well as a student when completing those particular lab experiments. (for example: applicants who experienced the "The Bird lab" or "Avida-ED lab" when they were students in the course are considered better qualified and thus selected for a job running the "The Bird lab" or "Avida-ED lab" (this is a big consideration if in the upcoming year courses will once again be using the "The Bird lab" or "Avida-ED lab").



- Lecture LAs for biology ideally are applicants who experienced the lecture topics, readings, homework, and pedagogies used in courses that will be offered in the upcoming year, and hence are considered better qualified to be a lecture LA for those courses (for example, if Profs X&Y use online Evo-Ed.com modules throughout the semester as a form of textbook, and students perform case studies during each lecture, applicants who experienced that as a student are far better qualified to serve as an LA for those courses in the upcoming year).

Job Description

Job Description for students working as a Biology Learning Assistant at LBC for the LB144 and LB145 courses (Introductory Biology, Lyman Briggs College)

Course and context: LB144 and LB145 are introductory biology courses, taken mainly by science majors, most in various biological fields (90%+ of LBC students major in a Biology field). The main content goals of these classes are to provide an introduction to concepts in organismal and cellular & molecular biology. In addition, skills goals include developing science processes, teamwork and communication skills. Each course consists of a lecture and lab component. LB144 consists of a 48-student lecture (80 min, twice a week) and 24-student lab (170min, once a week) sections. LB145 consists of a 48-student lecture (80 min, twice a week) and 24-student lab (110min, twice a week) sections. The teaching team consists of 1 professor, some undergraduate learning assistants and sometimes a graduate teaching assistant too.

ULA Training and Preparation: LAs participate in a pre-semester training session that covers general pedagogical concerns and tools (How to create an inclusive classroom, how to communicate effectively etc.) and content specific training (biological safety, hazardous safety training, course content and structure-specific training). In addition, LAs attend weekly meetings to plan and prepare for the coming week. Weekly meetings focus on reflecting on the past week, discussing general approaches to facilitating student learning, such as “how to ask probing questions, how to resolve team conflicts, how to promote student participation etc.” as well as content specific learning strategies like common student misconceptions and struggles.

Learning environment: Introductory Biology (LB144 & 145) courses are reformed and often flipped lecture and lab experiences using evidence-based teaching methods to assure actual learning occurs, not just teaching. Where the focus tends to be on professional practice (ie. skills) like experimental design as well as communication. And in lecture the teaching sometimes lasts longer topics/chapters, spending more time talking about a topic, rather than covering material quickly. Laboratory experiences are designed to train students for entry into a professional research setting. They too tend to focus on practice of scientific thinking and skills of design (i.e. “doing biology”) in semester-long projects, rather than many different 3hr long “cookbook” labs that briefly expose students to traditional methods.

The Roles of the ULA: Here are examples of things you will do. Since you would have taken 144/145 as a student you will have observed LAs doing this in lab and in lecture.

- facilitating group discussions / in-class lecture and lab activities
- carrying microphones to each student who asks or answers a question, so they are heard.
- randomly picking from a deck of name cards to engage everyone.



- providing feedback to students, including help on research projects and biology content, administering quizzes etc.
- providing training and practice to students so they succeed on written and verbal exams
- help co-teach in lecture, during active learning exercises circulate the room and directly interact with student groups, clarifying instructions, posing questions, and guiding thinking
- leading 5-minute "journal clubs" during lecture or lab. Anytime students are challenged to evaluate a figure from a publication, the ULAs often take the lead guiding students in the discussion.
- in the laboratory, in addition to preparing equipment and supplies, LAs assist the students in idea development, project completion, and provide support in a number of roles inside and outside the course.
- The LAs act as role models for the students in the class, which has been found to be especially important for women and non-majority students.

Often a LA will work in BOTH lab and lecture, sometimes they will focus on just lab or just lecture.

Example time breakdown for ULAs from LB145:

Regular Weekly Time Commitments for Lecture ULAs

1. In-class Instruction	3.0 hours
2. Prep Time	2.0 hours
3. Prep Meeting	1.0 hour
4. Outside class Grading/OHs	4.0 hours
TOTAL	10.0 hours

Regular Weekly Time Commitments for Lab ULAs

1. In-Lab Instruction	4.5 hours
2. Prep Meeting	1.0 hours
3. Prep Time/Grading	3.5 hour
4. Open Lab Office Hours (OHs)	1.0 hour
TOTAL	10.0 hours

Note: These are general breakdowns of potential weekly time commitments. These may vary somewhat from instructor to instructor.



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Chemistry

LB171 & LB172 General Chemistry I & II Lecture

Job Description:

The chem lecture ULA responsibilities are as follows:

- Support a lecture section 2-3 times a week
- Run 2-3 recitation sections each week.
- Attend a 1-hour weekly LA meeting with the Profs
- Hold 1-3 office hours each week
- Help grade the quizzes / exams

This is 8-12 hours of ULA work each week depending on if it's a week with or without quiz grading. Unlike lab ULA work, we cannot offer half-time ULA work on the chem recitation / lecture team. While we technically hire one semester at a time, there is a highly valued pattern of the fall chem lecture / recitation ULAs remaining on the chem lecture / recitation team in the spring.

How hiring decisions are made:

Gen chem lecture ULAs are usually former gen chem lab ULAs. We look for lab ULAs who are interested in being a lecture LA, available at the times we need, and we think would be particularly effective in supporting students problem solving work.

LB171L & LB172L General Chemistry I & II Lab

Job Description:

Folks are hired for either 5 hrs / week or 10 hrs / week. These hours work out to be “spent” roughly as follows:

Half-time chem lab LAs (5 hrs/week)	Full-time chem lab LAs (10 hrs/week)
1x 3-hour lab each week	2x 3-hour lab each week
1x 1-hour LA meeting each week	1x 1-hour LA meeting each week
1x 1-hour office hour *every other* week On an off week this hour is used for prep and/or “banked” for giving feedback on student work	1x 1-hour office hour *every* week
	2 hours used for prep and/or “banked” for giving feedback on student work



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You could also get involved in prepping the chemicals and consumables for lab each week. This is called “lab prep.”

After folks are offered chem lab spots, one of the chem lab faculty sends out an availability survey to the hired folks 1-2 months before each semester to figure out folks availability for each lab session and interest in prep work.

How hiring decisions are made:

We look for chemistry lab ULAs who are interested in being a chem lab LA, have completed relevant coursework (i.e. LB171, LB172, LB171L, and LB172L, and those who think or demonstrate ability to be particularly effective in supporting a collaborative laboratory work



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Physics

LB274 Physics II

Job Description:

The typical physics ULA responsibilities for LB 274 are as follows:

- Support a synchronous studio section of introductory physics for 4-6 hours each week (this may be across multiple sections or multiple days within a single section). During class ULAs mediate small and large group discussion and support empirical investigations.
- Attend a weekly synchronous 1.5 hour prep meeting with the instructional team
- Hold 1 helproom hour each week
- Support the asynchronous grading of weekly homework activities each week (~ 1 hour per week)

This is 8-10 hours of ULA work each week depending on grading assignments for the week. While we technically hire one semester at a time, there is a highly valued pattern of the fall physics studio ULAs remaining on the physics ULA team in the spring.

How hiring decisions are made:

We look for studio physics ULAs who will be active participants in the instructional team, have completed relevant coursework (i.e. both semesters of introductory physics), and who we think would be particularly effective in supporting students in problem-solving and conceptual group work. We give preference to ULA applicants who are interested in working 8-10 hours per week and working both fall and spring semesters. We also seek to hire ULAs who are interested in being a future teacher and/or are interested in pursuing a physics major. Since a significant part of the job requires attending class sessions synchronously, we also must consider student availability during the hiring process.