

**Biology 360WL-001L (10087):
Laboratory in Biochemistry and Molecular Biology
Course Syllabus, Spring 2021**

COURSE INSTRUCTOR

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Office Hours: By appointment

COURSE INFORMATION

Meeting Information: TR, 11:30 am - 2:20 pm
via Zoom and Biological Sciences, Room 185*
*beginning Week 3
Credit hours: 3
Prerequisite: LS-BIOC 441
Course Attributes, Format and Teaching Mode:
Undergraduate, Laboratory, Classroom based

COURSE COORDINATOR AND INSTRUCTOR

Margaret Kincaid, PhD
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Office: SCB, 505C
Office Hours: By appointment

GRADUATE TEACHING ASSISTANT

Evan Pierce
Email: epgd5@mail.umkc.edu

COURSE DESCRIPTION AND LEARNING OBJECTIVES

Laboratory studies in biochemistry and molecular biology with an emphasis on modern techniques and quantitative relationships.

Upon completion of this course, the student will be able to:

1. maintain a complete and orderly laboratory notebook.
2. use a range of standard biochemical laboratory equipment.
3. demonstrate basic statistical and graphical display and evaluation of data.
4. demonstrate methods of quantitative handling of protein, DNA and reagent samples.
5. use spectroscopy, electrophoresis, chromatography and assays to measure sample concentrations and enzymatic activities.
6. demonstrate rudimentary familiarity with protein crystallography, including protein purification and crystallization as well as preparation of reports of laboratory procedures and experiments.

REQUIRED MATERIALS

BOOKS: None

Handouts will be provided in class and in Canvas.

SUPPLIES:

Lab coat, safety glasses and closed toe shoes
Paper, pens, pencils, etc. for note taking
3 ring binder for handouts and laboratory notes
Computer and internet access

Class materials and assignments, including supplemental Reading Assignments, Laboratory Assignments, Discussions, and Supplemental Readings, will be provided in class and/or posted on Canvas. You will be required to access the course Canvas site weekly for supplemental videos, reading materials, and information. All UMKC students are issued a University email account. This account is used by the University to communicate course, grade, financial aid, enrolment and other important college information. It is your responsibility to check your UMKC email account regularly for important information. **Use your UMKC e-mail account for correspondence with instructor or graduate teaching assistant. Be sure to include the word "Biochemistry 360 Laboratory" in your subject line.**

MINIMUM TECHNOLOGY REQUIREMENTS

SOFTWARE

1. Current version(s) of either [Firefox](#) and/or [Chrome](#) web browsers for Windows and/or Apple computers
2. Current version of Oracle/Java: [Download Java](#)
3. Current version of Adobe Reader: [Download Adobe Reader](#)
4. Current version of word processing software: [Download Office 365](#)
5. Popup blocking disabled

HARDWARE

1. A webcam is required
2. A headset with microphone is preferred, a microphone is required.
3. Broadband internet connection is preferred. Examples of broadband internet connection are high-speed DSL or a Cable modem. High-speed internet is available for students at [Campus Computer labs](#).

COURSE REQUIREMENTS

WEEKLY DISCUSSIONS:

Students are expected to participate in discussions conducted in Canvas. Discussions will demonstrate your mastery of the techniques learned in the course. The questions will be designed to assess your understanding of the core concepts of scientific experimentation, hypotheses, and techniques used during the course and your ability to think critically about issues and topics in molecular biology and biochemistry. Discussion questions will be drawn from all supplementary, laboratory, and reading material. In addition to discussion questions, or prompts, from the instructor, discussions will also be led by students as assigned. Additional information, including grading rubrics, for discussions can be found in Canvas.

LABORATORY QUIZZES:

It is important that you attend and are prepared for each and every laboratory session. In addition to attending lab and bringing the required materials, reviewing supplemental reading assignments, handouts, and material on Canvas it is also imperative so that you understand the laboratory materials to be covered that day. Reading Assignments and Lab Experiments are outlined in the Course Schedule. Quizzes will be administered as indicated on the course schedule. Quizzes will be comprehensive and can be in any format, including essay, short answer, multiple choice, etc. All laboratory, reading, and supplemental materials provided in class and on Canvas are subject to examination.

Missed quizzes, as a result of an unexcused absence, will receive a “0” score. **Make-up quizzes will not be given for unexcused absences.** If a student cannot take a quiz for a legitimate reason, **the instructor should be notified at least 24 hours before the quiz.** If a student misses a quiz for a legitimate, documented reason, the student will be given a make-up quiz. It is the student’s responsibility to provide documentation within 48 hours of return to campus and arrange make-up quizzes. Failure to provide documentation and schedule make-up quizzes within 48 hours of return to campus will result in a “0” score the missed quiz. Make-up quizzes may be in any format, including essay, short answer, multiple choice, etc.

LABORATORY EXERCISES AND NOTEBOOK:

Students are required to complete the questions and/or exercises provided for each laboratory as well as maintaining an accurate laboratory notebook. The questions and laboratory notebooks will be checked several times throughout the semester for completion and accuracy. Due dates are listed in the Course Schedule. Your answers to the questions and laboratory notebook should be easily read and interpreted by anyone. **No late assignments or notebooks will be accepted.** If you are absent from class, regardless of the reason, you are responsible for turning in your assignments on time. If circumstances do not allow you to turn your assignments in person, you may scan and email these assignments to the instructor by the due date and they will be considered on time. If you chose to do this, you would be expected to bring a hard copy when you return to class.

WRITING INTENSIVE ARTICLE SUMMARIES:

Students will submit four ~2-page (**500 word minimum**) article summaries during the semester. Additional information (articles, assignment description, due date, and grading rubric) can be found in Canvas.

GROUP PRESENTATION:

Students will participate in a group presentation. Additional information (presentation topic, presentation criteria, due date, and grading rubric) can be found in Canvas.

FINAL PROJECT:

Students will be required to complete a final project and present your project in poster format. Additional information (project description, poster template, and grading rubric) can be found in Canvas.

ATTENDANCE/PARTICIPATION/TECHNIQUE/LABORATORY SAFETY ASSESSMENT:

Attendance, proper technique, preparation, and participation during the laboratory (via Zoom or during face-to-face instruction) is mandatory and will be assessed. Students are expected to study the assigned reading material prior to attending the class and to come to class prepared. All material is subject to being quizzed. Proper use of laboratory technique will also be assessed throughout the semester. Failure to use proper technique or misuse of equipment will result in a loss of points from the final course grade. Unexcused absences will result in loss of points.

For health and safety reasons, cell phone usage (including but not limited to talking, texting, photos, music) is not permitted in the biochemistry laboratory. **Cell phone or electronic device use during class will result in point deductions from the participation/technique/lab safety score.** Laboratory safety rules and guidelines are to be followed at all times in the laboratory. Neglect of these guidelines may result in the loss of points from a student's grade (this includes inappropriate attire, missing lab glasses or lab coats, disregard of laboratory/safety rules, disregard of classroom instruction, etc).

EVALUATION AND GRADING

LS-BIOC 360WL GENERAL EVALUATION/ASSESSMENT MEASURES

Discussions (14 @ 35 pts. each)	490 pts.
Discussion Questions/Prompts (2 @ 25 pts. each)	50 pts.
Quizzes (10 @ 10 pts. each)	100 pts.
Assignments, Laboratory Experiment Questions, and Notebook	130 pts.
Group Presentation	50 pts.
Article Summaries (4 @ 50 pts. each)	200 pts.
Final Project Poster Presentation	100 pts.
<u>Attendance/Participation/Technique/Laboratory Safety Assessment</u>	<u>150 pts.</u>
TOTAL	1270 pts.

GRADING SCALE*

A	93 -100%
A-	90 - 92%
B+	88 - 89%
B	83 - 87%
B-	80 - 82%
C+	78 - 79%
C	73 - 77%
C-	70 - 72%
D+	68 - 69%
D	63 - 67%
D-	60 - 62%
F	>60%

*Tentative grading scale. Assignment of final course letter grades will be determined by the course instructors after the conclusion of all course work.

COURSE POLICIES

1) Attendance:

Class attendance is expected at all times, including Zoom classes. Due to the nature of molecular biology and biochemistry experiments, some work will be required outside of the scheduled laboratory class time. Role will be taken at the beginning of each class period. You must inform the Instructor via email if you will be late prior to the day of lab. **Students who are tardy will not be able to make-up quizzes or receive extra time on coursework.** Students will be marked absent if more than 10 minutes late for class. Students who leave prior to the end of class will be marked with an absence. Unexcused absences will result in a loss of points for the daily quizzes, questions for the lab(s) performed and result(s) collected, and daily points (attendance/participation/technique/laboratory safety) points. **A student must provide written documentation to the instructor if they are absent in order to be excused, and an excused absence is up to the discretion of the instructor. Missed quizzes as a result of unexcused absences will not be subject to make-up.**

2) Preparation:

Students are expected to study the assigned reading material prior to attending the class. All material is subject to being quizzed.

3) Participation:

Questions to the instructor regarding the material are welcome during laboratory. Some additional time is required for this laboratory course outside scheduled class time. Participation will be assessed throughout the semester through a variety of methods, such as unannounced quizzes.

4) Technique and Safety:

Following proper procedure and safety precautions are of the utmost importance in the laboratory. It is expected that you will listen and follow instruction given by the instructor. Failure to do so could result in injury or illness to yourself or classmates. Students that have to be repeatedly reminded to use correct procedures or follow safety precautions may lose points from their grade.

5) Communications:

All class material will be made available on Canvas. Questions about laboratory and/or reading material may be asked in class so that everyone may benefit. (Remember, if you're confused, chances are that other people are as well). Personal questions (about grading, etc.) can be asked privately or via email to the instructor. Emails received during the week will be responded to within 24 hours. Emails received on weekends will be responded to the following Monday by 5:00 pm. **Your UMKC email will be used by your Instructor for contact. Check your email regularly.**

6) Absences and Late Assignments:

No late work will be accepted.

Make up quizzes will be given only for excused absences in advance (with advance written notification and/or evidence such as a hospital/doctor's note, jury duty, police report etc.) at the discretion of the course instructor. Documentation must be received and make-up quizzes must be arranged within 48 hours of return to campus. The format of the make up quiz will be determined by the instructor.

7) Laboratory Safety

You will be instructed on the correct procedures to use in this laboratory to conduct your work safely. You are required to be familiar with the rules for safe procedures and to use them as instructed. Students who do not follow the safety rules will not be permitted to work in the lab, and will lose credit for the work missed. If there are specific or special safety concerns with a particular experiment, these will be provided prior to students performing the procedure.

STUDENT CONDUCT, CHEATING, AND PLAGIARISM POLICY

All students are expected to be punctual, respectful, and attentive during all class sessions and during all interactions in the Canvas course site and during Zoom meetings, both to the Instructor, Teaching Assistants, and other students. Tardiness is considered an absence and will be treated as such. Disruption/disrespect includes but is not limited to: any use of cell phones, electronic devices, alarms; speaking in class during instruction, quizzes, or exams unless asking or answering questions to the Instructor; tardiness; inappropriate comments or actions; performing work unrelated to LS-BIOC360L/WL in class.

Remember that all interactions in an online classroom are in written form and students are expected to adhere to the general rules of “Netiquette” when communicating with classmates and your instructor. The following are general guidelines:

1. Remember that Discussion Boards are meant to be constructive exchanges of ideas.
2. Keep messages on topic and to the point.
3. Always check your grammar, punctuation, and composition. Take time in crafting posts and responses, as this demonstrates respect for your fellow classmates and readers.
4. Do not post messages in all capital letters, as this can come across as SHOUTING. Also, use **boldface** and *italics* sparingly, as this can be interpreted as sarcasm.
5. Be considerate. Avoid rude, inappropriate, or threatening language, inflammatory responses, and personal attacks.

All assignments will be submitted to TurnItIn. Please use this resource to check yourself for inadvertent plagiarism. Cheating or plagiarism on any written assignment will not be tolerated and will earn a zero grade on that assignment. The general University policy on student conduct may be found at:

https://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct

The Board of Curators of the University of Missouri recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. Academic dishonesty, including cheating, plagiarism or sabotage, is adjudicated through the University of Missouri Student Conduct Code and Rules of Procedures in Student Conduct Matters.

Cheating on any exam or quiz or plagiarism on any assignment will not be tolerated and will earn a zero grade on that exam/quiz/assignment. The UMKC policy may be found at:

http://www.umkc.edu/catalog/Student_Conduct.html.

ACADEMIC INQUIRY, COURSE DISCUSSION, AND PRIVACY:

There will be **no audio or video recording of lectures, Zoom meetings, or laboratory** without the written consent of the instructor. Students do not have permission to post any course material (content posted in Canvas, course discussions, etc.) to any third-party site. Posting of material to a third-party site is a violation of the student code of conduct and will be reported to the Academic Integrity Officer.

University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in [Section 200.015 of the Collected Rules and Regulations](#). In this class, students may not make any audio or video recordings of course activity (including those recordings prepared by an instructor), except students permitted to record as an accommodation under Section 240.040 of the Collected Rules. All other students who record and/or distribute audio or video recordings of class activity are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

Those students who have written permission from the course instructor to record are not permitted to redistribute any audio or video recordings of statements or comments from the course to individuals who are not students in the course without the express permission of the faculty member and of any students who are recorded, including those recordings prepared by an instructor. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

GRADE DISPUTES

Questions regarding grading must be submitted to the course instructor, **in writing, within 3 days** from when the assignment was returned. When submitting grade disputes, please be sure to include the following:

1. Name (first and last) of student submitting the grade dispute.
2. The original exam with the disputed criteria highlighted or prominently circled.
3. A written/typed description specifically describing why your assignment needs to be re-evaluated (i.e. "...points for assignment were miscalculated," "additional points for criteria XX in the rubric should be awarded because...", etc.).

Grade disputes not following the above guidelines will not be evaluated.

SBC GRADE APPEAL POLICY

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the instructor. The grade appeal procedure is available only for review of allegedly capricious grading and not for review of the instructor's evaluation of the student's academic performance.

Capricious grading, as that term is used here, comprises any of the following:

- The assignment of a grade to a particular student on some basis other than the performance in the course.
- The assignment of a grade to a particular student according to more exacting or demanding standards than were applied to other students in the course; (Note: Additional or different grading criteria may be applied to graduate students enrolled for graduate credit in 300- and 400-level courses.)
- The assignment of a grade by a substantial departure from the instructor's previously announced standards.
- If a student wishes to appeal their grade, the student should first discuss the issue fully with the instructor of the course. If the issue is not resolved with informal discussion, the student may appeal the grade to the course coordinator by the submission of a [SBC Grade Appeal Form](#). This must be done after the instructor submits grades to the Registrar and before the end of the sixth week in the succeeding regular academic semester. If the matter is not resolved satisfactorily for the student, further review is through the Division Head for Molecular Biology & Biochemistry, Dr. Anthony Persechini, persechinia@umkc.edu, BSB 501. Following the Division review, the student may appeal to the Dean of the SBS. Following the Dean's review, the student may appeal to the Provost, or their designee. The decision of the Provost Office is final. The [UMKC grade appeal policy](#) is available at the Provosts web site.

COVID-19 ACADEMIC ACCOMMODATIONS

If you are diagnosed with COVID-19, are required to self-isolate because you may have come in contact with someone who has COVID-19, or are at high-risk of severe illness from COVID-19, you should seek academic accommodations. Those at high-risk of severe illness from COVID-19 are people: aged 65 years and older, or living in a nursing home or long-term care facility, or with chronic lung disease or moderate to severe asthma, or who have serious heart conditions, or who are immunocompromised, or with severe obesity (body mass index [BMI] ≥ 40), or with diabetes, or with chronic kidney disease undergoing dialysis or people with liver disease. It is especially important to seek accommodations if any of these conditions are not well controlled. Student Disability Services requires medical documentation of the condition and recommendations for accommodations from a qualified medical professional. Once you have the documentation please contact Scott Laurent at (816) 235-5696 or by email at laurentr@umkc.edu. We will then schedule a Zoom meeting to complete the accommodation plan.

ADDITIONAL RESOURCES AND POLICIES

Important UMKC Resources and Policies are applicable to every course and every student at UMKC. These are located in the Canvas site for this course under the “UMKC Policies” tab. As a UMKC student, you are expected to review and abide by these policies. If you have any questions, please contact your instructor for clarification. This course follows the “Faculty not allowing recording” option of the Academic Inquiry, Course Discussion and Privacy policy.

Additional University Resources and Policies can be accessed under the “UMKC Policies” tab within Canvas:

1. UMKC Connect
2. Academic Calendar
3. Academic Honesty
4. Academic Inquiry, Course Discussion and Privacy
5. Attendance Policy
6. Campus Safety
7. Counseling and Health Services Available at UMKC
8. Disability Support Services
9. English Proficiency Statement
10. Grade Appeal Policy
11. Discrimination Grievance Procedures for Students
12. Privacy and Accessibility Policies
13. Statement of Human Rights
14. Title IX

**Biology 360WL-001L (10087):
Laboratory in Biochemistry and Molecular Biology
Lab Experiments and Assignment Deadlines Tentative Schedule*, Spring 2021**
*subject to change

DATE	LABORATORY TOPIC AND/OR EXPERIMENT	DISCUSSION, ASSIGNMENT, QUIZ	WI ASSIGNMENTS	INSTRUCTOR
1/19/21	Laboratory Introduction and Safety	CITI Training Modules (See Canvas)		Kincaid
1/21/21	Laboratory Calculations and Equipment	Laboratory Calculations		Kincaid
1/26/21	Central Dogma, DNA, Mutations, Genetic Engineering, DNA Sequencing, Bioinformatics	Discussion 1 (Begins Monday) Laboratory Calculations Due DNA Sequencing and Bioinformatic Lab		Kincaid
1/28/21	Bioinformatics, Cont.	Discussion 1 (Due Friday) CITI Training Modules Due Bioinformatic Lab Due Quiz 1		Kincaid
2/2/21	Gene Cloning	Discussion 2 (Begins Monday)		Kincaid
2/4/21	Gene Cloning, cont.	Discussion 2 (Due Friday) Quiz 2		Kincaid
2/9/21	Gene Cloning, cont.	Discussion 3 (Begins Monday)	Lead Discussion Assignment 1	Kincaid
2/11/21	Gene Cloning, cont.	Discussion 3 (Due Friday) Quiz 3	Article Summary 1	Kincaid

2/16/21	Identification of Genetically Modified Food Using PCR	Discussion 4 (Begins Monday)	Lead Discussion Assignment 2	Kincaid
2/18/21	Identification of Genetically Modified Food Using PCR, cont.	Discussion 4 (Due Friday) Quiz 4 Experiment Questions and Notebook Check 1		Kincaid
2/23/21	Separation of RNA and DNA by Gel Filtration Chromatography	Discussion 5 (Begins Monday)	Lead Discussion Assignment 3	Kincaid
2/25/21	Separation of RNA and DNA by Gel Filtration Chromatography, Cont. Microarrays	Discussion 5 (Due Friday) Quiz 5		Kincaid
3/2/21	Purification of EcoRI	Discussion 6 (Begins Monday)	Lead Discussion Assignment 4	Kincaid
3/4/21	Purification of EcoRI	Discussion 6 (Due Friday) Quiz 6	Article Summary 2	Kincaid
3/9/21	Cell Types in the Brain and Protein Profiling	Discussion 7 (Begins Monday)	Lead Discussion Assignment 5	Kincaid
3/11/21	Cell Types in the Brain and Protein Profiling, cont.	Discussion 7 (Due Friday) Quiz 7 Experiment Questions and Notebook Check 2		Kincaid
3/16/21	Detecting Risk Factors for Alzheimer's Disease Using Western Blot	Discussion 8 (Begins Monday)	Lead Discussion Assignment 6	Kincaid

3/18/21	Detecting Risk Factors for Alzheimer's Disease Using Western Blot, cont.	Discussion 8 (Due Friday) Quiz 8		Kincaid
3/23/21	Detecting Risk Factors for Alzheimer's Disease Using Western Blot, cont. GFP Expression and Purification	Discussion 9 (Begins Monday)		Kincaid
3/25/21	Detecting Risk Factors for Alzheimer's Disease Using Western Blot, cont. GFP Expression and Purification, cont.	Discussion 9 (Due Friday) Quiz 9 Experiment Questions and Notebook Check 3	Article Summary 3	Kincaid
4/6/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 10 (Begins Monday)		Yao
4/8/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 10 (Due Friday) Quiz 10 (Dr. Kincaid)		Yao
4/13/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 11 (Begins Monday)		Yao
4/15/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 11 (Due Friday) Group Presentation 1 (Topic: TBA)		Yao
4/20/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 12 (Begins Monday)		Yao

4/22/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 12 (Due Friday) Group Presentation 2 (Topic: TBA)	Article Summary 4	Yao
4/27/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 13 (Begins Monday)		Yao
4/29/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 13 (Due Friday) Group Presentation 3 (Topic: TBA)		Yao
5/4/21	Final Project: TBA (schedule will be available on Canvas)	Discussion 14 (Begins Monday)		Yao
5/6/21		Discussion 14 (Due Friday) Final Project Poster Presentations		Yao

Biochemistry Laboratory Safety Statement

Biology 360L/WL

The lab exercises in this course involve the use of living organisms, chemicals, and reagents. Although the microorganisms we use are not considered to be highly virulent, **all microorganisms should be treated as potential pathogens** (organisms capable of causing disease).

The following rules must be observed at all times to prevent accidental injury to and infection of yourself and others and to minimize contamination of the lab environment:

1. **Never place books, backpacks, purses, etc., on bench tops.** Always place these in the assigned cubicles. Keep manuals and pens away from your wet-work area.
2. Electronic devices should not be brought into the lab. This includes, but is not limited to iPods, MP3 players, cell phones, and calculators.
3. Clean your work area with disinfectant solution at the **beginning AND end** of each lab.
4. **Wash your hands** with the soap and dry with paper towels when entering and leaving the lab.
5. Wear a **lab coat** at all times while working in the lab to prevent contamination or accidental staining of your clothing.
 - a. **Closed-toe shoes** (no sandals) are to be worn in the lab
 - b. **Long hair must be tied back** to prevent exposure to flame and contamination of cultures.
 - c. **Gloves** should be worn when handling microorganisms and hazardous chemicals.
6. **Do not place anything in your mouth or eyes while in the lab.** This includes pencils, food, and fingers. Keep your hands away from your mouth and eyes.
 - a. Eating and drinking are **prohibited** in the lab at all times.
 - b. This includes gum, cough drops, and candy.
 - c. Do not apply cosmetics in the lab. This includes chapstick.
 - d. **Never pipet by mouth.** Use a mechanical pipetting device.
7. **Do not remove media, reagents, chemicals, materials, equipment, or bacterial cultures from the laboratory.** This is absolutely prohibited and unnecessary.
8. Do not place contaminated instruments such as inoculating loops, pipettes, tips, etc. on bench tops. Loops, flasks, tubes, etc. should be sterilized by incineration, and pipettes should be disposed of in designated receptacles.
9. Carry cultures in a test tube rack when moving around the lab or when keeping cultures on bench tops for use. This prevents accidents and contamination of your person or belongings.
10. **Immediately cover spilled cultures or broken culture tubes with paper towels and then saturate them with disinfectant solution.** Notify your instructor that there has been a spill. After 15 minutes dispose of the towels and broken items as indicated by your instructor.
11. **Report accidental cuts or burns to the instructor immediately.**
12. At the end of each lab session, place all cultures and materials in the proper disposal area.
13. Persons who are immunocompromised or immunosuppressed may be at increased risk of acquiring infection. It is incumbent upon you to discuss all such conditions with your personal physician prior to participation in the laboratory to determine if it is safe for you to participate in the laboratory exercises. Should your physician determine that you should not participate in this lab, please have him or her write a note stating the concerns. Alternative accommodations may be indicated.

STUDENT AGREEMENT ON LABORATORY SAFETY

I have read the laboratory safety statement for the Biochemistry Laboratory at the University of Missouri-Kansas City, and I understand its content. I agree to abide by all laboratory rules set forth by the instructor. I understand that my safety is entirely my own responsibility and that I may be putting myself and others in danger if I do not abide by all the rules set forth by the instructor.

COURSE: BIOL 360L/WL

NAME OF STUDENT (PRINT): _____

SIGNATURE OF STUDENT: _____

DATE: _____