Introductory Microbiology Lab

Instructor
Renee Alt
232 Burrill Hall
rlalt@illinois.edu
217-333-4306

Instructional Team

<table>
<thead>
<tr>
<th>Evan Chen</th>
<th>Wyatt Marciniak-Haynosch</th>
<th>Kevin Cheng</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sections: A and B</td>
<td>Sections: Prep</td>
<td>Sections: E and F</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:yanheng2@illinois.edu">yanheng2@illinois.edu</a></td>
<td>Email: <a href="mailto:jwm6@illinois.edu">jwm6@illinois.edu</a></td>
<td>Email: <a href="mailto:kjchens2@illinois.edu">kjchens2@illinois.edu</a></td>
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<table>
<thead>
<tr>
<th>Lewis Kwon</th>
<th>Kayli Hillard</th>
<th>Meghan Connolly</th>
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<tbody>
<tr>
<td>Section: G</td>
<td>Sections: E</td>
<td>Section: C</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:ohhyunk2@illinois.edu">ohhyunk2@illinois.edu</a></td>
<td>Email: <a href="mailto:kaylinh2@illinois.edu">kaylinh2@illinois.edu</a></td>
<td>Email: <a href="mailto:meghanc6@illinois.edu">meghanc6@illinois.edu</a></td>
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Class Meeting Schedule
Double weekly sessions on either Monday/Wednesday or Tuesday/Thursday.

Course Overview and Description
Laboratory introduction to the techniques employed in the investigation of microbial activities and properties; experiments designed to familiarize the student with the handling, identification, and characterization of microorganisms and their activities, particularly those of interest to man.

Course Prerequisites, Requirements met (general education, major, minor)
Credit is not given for both MCB 101 and MCB 301. Prerequisite: Credit or concurrent registration in MCB 100.

Student Learning Outcomes
At the end of this course students will be able to:

(Skills)
- analyze scientific process and results via written communication.
- critically assess material prior to manual application and execution of experiments.
• apply mathematical concepts to biological processes and phenomena.
• construct an appreciation for the presence of bacterial life in various environments.

(Content)
• demonstrate proficiency with basic microbiological techniques.
• illustrate the need for energy and the means to make it.
• explain modes of organismal adaptation.
• employ microbiological techniques, such as staining, observation and biochemical assessments, to discriminate between bacterial strains for identification.

Course Text/Materials Information (both required and recommended)

Required Course Materials:

2. Ruler and non-graphing Scientific Calculator, required at every lab and exam

Course Website, Course Tools
Course LMS Canvas https://canvas.illinois.edu/
Canvas login: netid password: AD password

Grading Information and Breakdown
All point totals are estimates and may be altered slightly throughout the course of the semester. Students who add the course late, any missed assignments will be counted as your drops.

1. Student grades in MCB 101 will be based on a total of 1000 points. Categories listed below are approximate, but should closely resemble the final distribution.

<table>
<thead>
<tr>
<th>Category</th>
<th>Points possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Exams</td>
<td></td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>100</td>
</tr>
<tr>
<td>Final exam</td>
<td>100</td>
</tr>
<tr>
<td>B. Lab Assignments</td>
<td></td>
</tr>
<tr>
<td>11 Lab Homeworks</td>
<td>240</td>
</tr>
<tr>
<td>11 Lab notebook assignments</td>
<td>435</td>
</tr>
<tr>
<td>Lab Attendance</td>
<td>75</td>
</tr>
<tr>
<td>Lab Practical exam</td>
<td>50</td>
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</table>

Total lab points: 1000 points possible
All point totals are estimates and may be altered slightly throughout the course of the semester. Students who add the course late, any missed assignments will be counted as your drops.

2. The point totals contained in the following table represent the use of the plus/minus grading system coupled with a 4.0 grade point system. The University has assigned the grade point values shown for each letter grade. Students who earn the points shown below (out of 1,000 possible points) will be guaranteed the indicated letter grade. At semester's end, after the final exam, the faculty will analyze the course grade distribution, and may decrease (to accommodate poor class performance on an examination), but will not increase the points needed for each grade.

**MCB 101 Standard Grade Scale**

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Point Ranges</th>
<th>Grade Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>1000–920</td>
<td>4.000</td>
</tr>
<tr>
<td>A</td>
<td>919–883</td>
<td>4.000</td>
</tr>
<tr>
<td>A-</td>
<td>882–850</td>
<td>3.667</td>
</tr>
<tr>
<td>B+</td>
<td>849–817</td>
<td>3.333</td>
</tr>
<tr>
<td>B</td>
<td>816–783</td>
<td>3.000</td>
</tr>
<tr>
<td>B-</td>
<td>782–750</td>
<td>2.667</td>
</tr>
<tr>
<td>C+</td>
<td>749–717</td>
<td>2.333</td>
</tr>
<tr>
<td>C</td>
<td>716–683</td>
<td>2.000</td>
</tr>
<tr>
<td>C-</td>
<td>682–650</td>
<td>1.667</td>
</tr>
<tr>
<td>D+</td>
<td>649–617</td>
<td>1.333</td>
</tr>
<tr>
<td>D</td>
<td>616–583</td>
<td>1.000</td>
</tr>
<tr>
<td>D-</td>
<td>582–550</td>
<td>0.667</td>
</tr>
<tr>
<td>F</td>
<td>549–0</td>
<td>0.000</td>
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### MCB 101
Experimental Microbiology

#### WEEK-BY-WEEK SCHEDULE
Spring 2024

<table>
<thead>
<tr>
<th>WEEK 1</th>
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<tbody>
<tr>
<td>Day 1</td>
<td>W/Th January 17/18, 2024</td>
</tr>
<tr>
<td></td>
<td>Review of Class Information/Policies</td>
</tr>
<tr>
<td></td>
<td>Review of Basic Laboratory Safety</td>
</tr>
<tr>
<td></td>
<td>1: Streak Plate and Aseptic Technique</td>
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<table>
<thead>
<tr>
<th>WEEK 2</th>
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<tbody>
<tr>
<td>Day 2</td>
<td>M/Tu January 22/23, 2024</td>
</tr>
<tr>
<td></td>
<td>1: Streak Plate, Evaluations</td>
</tr>
<tr>
<td></td>
<td>1: Spread Plate</td>
</tr>
<tr>
<td></td>
<td>1: Simple Stain</td>
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<tr>
<th></th>
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<tbody>
<tr>
<td>Day 3</td>
<td>W/Th, January 24/25, 2024</td>
</tr>
<tr>
<td></td>
<td>1: Spread Plate, Evaluations</td>
</tr>
<tr>
<td></td>
<td>2: Gram Stain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEEK 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 4</td>
<td>M/Tu, January 29/30, 2024</td>
</tr>
<tr>
<td></td>
<td>2: Acid-Fast Stain; Spore Stain; Negative Stain; Capsule Stain</td>
</tr>
<tr>
<td></td>
<td><strong>Experiment 1 Homework due at 11:59pm January 30</strong></td>
</tr>
</tbody>
</table>

| Day 5  | W/Th, January 31/February 1, 2024 |
|        | 3: Effectiveness of hand cleaners and RODAC plating, Day 1 |
|        | **Lab Report 2 due in Canvas at 11:59pm January 31/February 1 depending on section** |
|        | **Experiment 2 Homework due at 11:59pm February 1** |

| WEEK 4 |          |
Day 6 M/Tu, February 5/6, 2024

3: Effectiveness of hand cleaners and RODAC plating, Day 2
4: Enzymes & Environmental Adaptations, Day 1

Day 7 W/Th, February 7/8, 2024

4: Enzymes & Environmental Adaptations, Day 2
6: *Lactobacillus* fermentation of milk and Fermentation of cabbage, Day 1

**Experiment 3 Homework due at 11:59pm February 8**

**WEEK 5**

Day 8 M/Tu, February 12/13, 2024

6: *Lactobacillus* fermentation of milk and Fermentation of cabbage, Day 2

**Lab Report 3 due in Canvas at 11:59pm February 12/13 depending on section**
**Experiment 4 Homework due at 11:59pm February 13**

Day 9 W/Th, February 14/15, 2024

6: *Lactobacillus* fermentation of milk and Fermentation of cabbage, Day 3

**Lab Report 4 due in Canvas at 11:59pm February 14/15 depending on section**

**WEEK 6**

Day 10 M/Tu, February 19/20, 2024

6: *Lactobacillus* fermentation of milk and Fermentation of cabbage, Day 4

Day 11 W/Th, February 21/22, 2024

6: *Lactobacillus* fermentation of milk and Fermentation of cabbage, Day 5
# WEEK 7

Day 12 M/Tu, February 26/27, 2024

8: *E. coli* and Coliforms, Day 1  
7: Biochemical Tests, Day 1

**Experiment 5 Growth Curve (Lab Report) opens in Canvas at 2pm February 27**  
**Experiment 6 Homework due at 11:59pm February 27**

Day 13 W/Th, February 28/29, 2024

8: *E. coli* and Coliforms, Day 2  
7: Biochemical Tests, Day 2

**Lab Report 6 due in Canvas at 11:59pm February 28/29 depending on section**

**Thursday, February 29, 2024**

**Exam 1:** Covers: Aseptic Technique and Brightfield Microscopy, Staining  
Techniques in Microbiology, Fomites, Enzymes and Environmental Adaptations,  
Bacterial Fermentation of Food Products

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# WEEK 8

**M/Tu, March 4/5, 2024**

**NO LABS WILL MEET THESE DAYS**

Day 14 W/Th, March 6/7, 2024

8: *E. coli* and Coliforms, Day 3

**Experiment 7 Homework due at 11:59pm March 7**

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# DROP DEADLINE

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# WEEK 9

**Saturday March 9-Sunday March 17, 2024**  
**SPRING BREAK-NO CLASSES**
### WEEK 10

Day 15 M/Tu, March 18/19, 2024

8: *E. coli* and Coliforms, Day 4

**Lab Report 7 due in Canvas at 11:59pm March 18/19 depending on section**

**Experiment 5 Growth Curve due in Canvas at 11:59pm March 19**

Day 16 W/Th, March 20/21, 2024

8: *E. coli* and Coliforms, Day 5
9: Unknown Identification, Day 1

### WEEK 11

Day 17 M/Tu, March 25/26, 2024

8: *E. coli* and Coliforms, Day 6
9: Unknown Identification, Day 2

Day 18 W/Th, March 27/28, 2024

9: Unknown Identification, Day 3

**Experiment 8 Homework due at 11:59pm March 28**

### WEEK 12

Day 19 M/Tu, April 1/2, 2024

9: Unknown Identification, Day 4
10: MIC/MBC determination and Antibiotic susceptibility, Day 1

**Lab Report 8 due in Canvas at 11:59pm April 1/2 depending on section**

Day 20 W/Th, April 3/4, 2024

9: Unknown Identification, Day 5
10: MIC/MBC determination and Antibiotic susceptibility, Day 2
WEEK 12

Day 21 M/Tu, April 8/9, 2024

9: Unknown Identification, Day 6
10: MIC/MBC determination and Antibiotic susceptibility, Day 3

Day 22 W/Th, April 10/11, 2024

9: Unknown Identification, Day 7
11: Transposon Mutagenesis, Day 1

Experiment 10 Homework due at 11:59pm April 11

WEEK 13

Day 23 M/Tu, April 15/16, 2024

11: Transposon Mutagenesis, Day 2

Lab Report 10 due in Canvas at 11:59pm April 15/16 depending on section
Experiment 9 Homework due at 11:59pm April 16

Day 24 W/Th, April 17/18, 2024

11: Transposon Mutagenesis, Day 3
<table>
<thead>
<tr>
<th>WEEK 15</th>
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</thead>
<tbody>
<tr>
<td><strong>Day 25 M/Tu, April 22/23, 2024</strong></td>
</tr>
<tr>
<td>12: Proline &amp; Threonine auxotrophs; Prodigiosin cross-feeding; Arginine auxotrophs, Day 1</td>
</tr>
<tr>
<td><strong>Experiment 11 Homework due at 11:59pm April 23</strong></td>
</tr>
<tr>
<td><strong>Day 26 W/Th, April 24/25, 2024</strong></td>
</tr>
<tr>
<td>12: Proline &amp; Threonine auxotrophs; Prodigiosin cross-feeding; Arginine auxotrophs, Day 1</td>
</tr>
<tr>
<td>Lab Practical Review and Practice</td>
</tr>
<tr>
<td>Lab Clean Up and Drawer Inventory</td>
</tr>
<tr>
<td><strong>Lab Report 11 due in Canvas at 11:59pm April 24/25 depending on section</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEEK 16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 27 M/Tu, April 29/30, 2024</strong></td>
</tr>
<tr>
<td><strong>Lab Practical Exam, (50 points)</strong></td>
</tr>
<tr>
<td>Dilution Problem Calculation, Gram Stain, Brightfield Microscopy, Streak Plate, Spread Plate</td>
</tr>
<tr>
<td><strong>Lab Report 12 due in Canvas at 11:59pm April 29/30 depending on section</strong></td>
</tr>
<tr>
<td><strong>Experiment 12 Homework due at 11:59pm Wednesday April 30</strong></td>
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</tbody>
</table>

**Final Exam TBA**

**Final Exam Covers: Biochemical Tests, Growth Curve, Enteric Bacteria, Unknown Identification, Antibiotics, Antiseptics and Disinfectants, Transposon Mutagenesis of Serratia marcescens, Auxotrophy**
Course Policies
For non-academic campus assistance and support:
  • See Office of Diversity, Equity and Access (ODEA) information at the end of this document.

Student Advocacy Resources:
  • For student-centered advocacy programs and services visit: mcb.illinois.edu/undergrad/advising/resources.

Contacting MCB Course Personnel

1. MCB course personnel are more than happy to assist students.

2. Emails to instructors, TAs, or course coordinators will only be answered if they come from an @illinois.edu account. We will only use this account in order to protect your educational information and profile. As a student, please remember that when you email a staff member, it is important to include all pertinent information so that we can assist you in the most efficient and effective manner possible. This information includes:
   a) The course rubric in the subject line
   b) Your full first and last name
   c) Your NetID (the first part of your illinois.edu email account)
   d) Your UIN (9 digit number that can be found on your ICard)
   e) The course that you are concerned about (the course personnel often work with multiple courses)
   f) Your section letter/number
   g) The previous email "thread" or previous communicated information pertinent to the situation

3. Your cooperation will help us respond much more quickly to your concerns.

Policies:
  • Unfamiliarity with policies is not a defense for not knowing what they cover.

Attendance Policies

1. Regular class attendance is expected of all students at the University. (https://studentcode.illinois.edu/article1/part5/1-501/)
   Attendance in lab is mandatory. The best way for you to learn the course material is
through hands-on experience. Students are required to attend two, scheduled laboratory periods each week (1 hour and 50 minutes each). It is important to arrive on time in order to receive all pertinent information. Due to the nature of this course, both your presence and participation are required. Attendance will be recorded at every lab. As a result, you will only be allowed two excused absences for the semester, if warranted. Anything more than this will be considered unexcused, regardless of the reason or documentation. Excused absences will require: 1) contact with the instructor/coordinator within 24 hours of the absence, 2) the completion of the online absence report form, 3) the documentation requested by the instructor/coordinator and 4) an arrangement made for making-up the missed lab period (make-up labs are not guaranteed). Should you find yourself with multiple absences, we will assist you in preparing a petition for a Late Drop should this occur and be necessary after the drop deadline.

Attendance points can be checked in the ATLAS Gradebook found on the website.

2. Students must attend their scheduled lab section unless they are assigned to a make-up lab.

3. Tardiness will also be recorded at every lab:
   a) <5 minutes late - 0% reduction in points for that lab day
   b) 5-10 minutes late – 25% reduction in points for that lab day (any assignments due are now considered late)
   c) 10-30 minutes late – 50% reduction in points for that lab day
   d) More than 30 minutes late – No points will be given for that lab day even if all bench work is completed

4. Students who provide dated documentation of a personal emergency, confining illness, religious conflict or graduate/medical school interview within 48 hours may be allowed to make up missed lab work for credit. Any absence that does not fall into one of these categories will be evaluated by MCB 101 staff on a case-by-case basis. MCB 101 staff will then determine eligibility for make-labs or excused lab days.

5. Students who have advanced knowledge of events that will conflict with MCB 101 must present acceptable documentation of such events 48 hours prior to their absence. Failure to do so will result in the absence being considered unexcused and result in deduction of points from your lab score (total points deducted dependent upon the day).

6. Documentation for an absence must include relevant names, times, dates and an explanation of the date(s) and reason(s) for absence. NOTE: Absence due to illness will require a note from McKinley Health Center in order to be excused (Dial-a-nurse notes will not be accepted as documentation). Documentation that is provided by a family member will also not be accepted. Documentation will not be accepted past one week of the absence in question.
7. For each laboratory absence, students must complete the “Absence Report Form” available at the “Forms” link on the course web site. This form will be automatically forwarded to Renee Alt immediately upon completion. Note that this form may be completed online from any computer, in case of confining illness. Students are also required to submit supporting documentation to Renee Alt (232A Burrill Hall) as specified above. Documentation will not be accepted one week past the absence in question. **Extended absences (lasting 3 days or more) will require nothing less than a Dean’s letter as proper documentation.** The office of the Dean of Students is located in the Turner Student Services Building, 610 E. John Street, Champaign, 217-333-0050. You must request that a representative of that office provide Renee Alt with the necessary information to address your circumstance.

8. Students in evening lab sections, who have evening exams in other courses, do not qualify for make-up labs.

9. Class absences before and after vacations (e.g. Thanksgiving Break, Spring Break) are not excusable, except as aforementioned.
Class Absences

- Regular class attendance is expected of all students at the University. (http://odos.illinois.edu/studentAssistance/absence/revised_code.asp)

- If you find yourself ill, you must submit confirmation of a visit with a medical practitioner within 24 hours of your absence. The confirmation cannot be provided by a relative, even if the relative is a practitioner.

- The Office of the Dean of Students will only provide informative letters to instructors for protracted illness of 3 or more days, certain emergencies and to be present during the serious illness of immediate family members (parents, legal guardian, spouse/partner, siblings, children, or grandparents). These letters do not excuse you from class but merely provide information for the instructor to consider with regard to excusing the absence and permitting make-up work. Students must request absence letters from the Office of the Dean of Students after the student has returned to class but not more than 10 business days after the last date of absence.

- Absences that may be excused without a letter include circumstances beyond the student’s control such as medical treatment, surgery related to prolonged illness or injury, pregnancy, legal matters, citizenship or naturalization processes, or acts of nature which cause destruction to a primary residence or disrupt air travel. All will require documentation.

- Absences that may also be excused without a letter include a conference or job, graduate or professional school interviews, though a best effort should be made to schedule these events to minimize class attendance disruption. All will require documentation.

- Absences planned for the items listed in previous bullet point must be communicated to your instructor or course coordinator at least two weeks in advance of the absence. Failure to do so may result in the loss of opportunity to reschedule the missed class period and the portion of the grade associated with this class period.

- Absences that will not be excused include family events such as reunions or weddings, or presence during serious illness of extended family members (aunt, uncle, niece, nephew, or cousin).

- Unplanned absences may result in the loss of opportunity to reschedule the missed class period and, therefore, the portion of the grade associated with this class period.

- Absences will be handled according to individual course policy.
Religious Observances and Practices

1. Students are required to submit the Request for Accommodation for Religious Observances Form (which can be found at https://odos.illinois.edu/community-of-care/resources/students/religious-observances/) to their instructors and the Office of the Dean of Students requesting accommodation by the end of the second week of the course. Requests that are not submitted within this time frame may not be granted. Information about accommodations can be found in the Student Code: http://studentcode.illinois.edu/.

DRES Accommodations

1. We are committed to providing a learning environment where our students can succeed. If you require special accommodations, please contact us and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak Street, Champaign, call 217.333.4603, or email disability@illinois.edu. We will try to meet all accommodations once the process has started. Please note that accommodations are not retroactive to the beginning of the semester, but begin the day you contact your professor, instructor or coordinator with a current letter of accommodation from DRES.

2. If a student believes that they need DRES accommodations, they should contact DRES at disability@illinois.edu.

Exam Instructions

1. The exams will be given on Thursday evenings from 7:00pm to 8:00pm, please see syllabus for exam date. Log into Canvas early; the exams will begin at 7:00 PM sharp. Please see the MCB 101 website for any further details concerning exams. The use of Zoom Proctoring will be implemented for all MCB 101 exams. Instructions will be made available closer to the first exam date.

2. The exams will be administered in Canvas

3. Bring your University photo ID, several sharp #2 pencils, ruler, scientific calculator and an eraser. **Graphing calculators will not be allowed and use of one will result in forfeiture of your exam.**

4. **Cell phones and any other electronic devices, except for a scientific calculator, are NOT allowed.**
Exam Absences

1. The Office of the Dean of Students will only provide informative letters to instructors for protracted illness of 3 or more days, certain emergencies and to be present during the serious illness of immediate family members (parents, legal guardian, spouse/partner, siblings, children, or grandparents). These letters do not excuse you from class but merely provide information for the instructor to consider with regard to excusing the absence and permitting make-up work. Students must request absence letters from the Office of the Dean of Students after the student has returned to class but not more than 10 business days after the last date of absence.

2. Information of what is considered an excused absence and what is not can be found on the MCB 101 website. What type of documentation will be accepted can also be found on the MCB 101 website.

3. If you must miss an exam due to unforeseen circumstances, you are required to contact your instructor or course coordinator within 24 hours of the absence. You will then have 48 hours from the absence in which to submit documentation to your instructor or course coordinator. You must also submit an online Conflict Form if one is available on your course website. Course personnel will evaluate documentation and decide whether or not there will be an option to compensate for the missed exam through either a make-up exam or proration. Failure to follow this procedure will result in a zero for the exam.

4. There will be instances when the student must make an individual choice about their ability to perform on an exam and will need to accept any and all consequences for that choice.

5. If you find yourself ill, you must submit confirmation of a visit with a medical practitioner within 24 hours of your absence. The confirmation cannot be provided by a relative, even if the relative is a practitioner.

6. If the absence is a result of a protracted illness of 3 days or more, you should follow the procedure for obtaining a letter from the Office of the Dean of Students. The request may be made once the student returns to class but not more than 10 business days after the last date of absence.

7. If you must miss the exam, the possibility exists to have the one exam prorated. The final exam cannot be prorated. Please note that the percentile that we use to calculate your score may be different from the percentile seen in the online gradebook, due to the accounting for missing scores.
Exam Conflicts

1. If you have a regularly scheduled University course that conflicts with the exam, you should complete the online Conflict Exam Request Form on the course website. This request must be made by 5:00 pm not less than 3 business days prior to the exam. Requests made after 5:00 pm and less than 3 business days prior to the exam will not be granted. See course policies for a specific deadline for your course.

2. Work schedules should be adjusted, if at all possible, in order to eliminate a conflict with scheduled exams. Please plan accordingly at the beginning of the semester. If eliminating a conflict is not possible, the student should complete the online Conflict Exam Request Form on the course website. This request must be made by 5:00 pm not less than 3 business days prior to the exam. Requests made after 5:00 pm and less than 3 business days prior to the exam will not be granted.

3. Students that are formally participating in officially recognized groups, such as athletic teams and performing groups, with a conflict should request a conflict exam by 5:00 pm not less than 3 days prior to the exam via the online Conflict Request Form. Formal participation does not include general meetings of RSOs or any other recognized groups. Documentation of the event will be required prior to scheduling the conflict exam. Requests made after 5:00 pm and less than 3 business days prior to the exam will not be granted.

4. Students with DRES accommodations should also submit the online Conflict Request Form by 5:00 pm no later than 3 business days prior to the exam. Requests made after 5:00 pm and less than 3 business days prior to the exam will not be granted.

5. Conflict exams are only given on the regular exam day, at the date, time and location agreed upon by Renee Alt and the student.

6. Scores for conflicts will not be posted until all forms and documentation are received and approved. At the end of the semester these will be changed to “0” if above criteria has not been met.
Final Exam Instructions

1. The time and place for the Final Exam will be determined late in the semester. When known this information will be posted on the MCB 301 website and in the laboratory. The exam will be held during the week of December 10-17, 2021. **Do not make plans to leave campus until after December 17th!**

2. Bring your University photo ID, several sharp #2 pencils, ruler, **scientific calculator** and an eraser. **Graphing calculators will not be allowed and use of one will result in forfeiture of your exam.**

3. **Cell phones or electronic devices, except for a scientific calculator, are not allowed.**

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Final Exam Absence

1. If you must miss a final exam due to unforeseen circumstances, you are required to contact your instructor or course coordinator within 24 hours of the absence. You must also contact the Dean of your college. Finally, you must submit an online Absence Form if one is available on your course website. You will receive an ABS (absent) in the course if you miss the final exam. This ABS will result in an F in the course unless action is taken. The Dean can approve the change of the ABS to an Incomplete, which then allows a limited window of time for you to complete the final exam and earn a grade in the course.

2. There will be instances when the student must make an individual choice about their ability to perform on an exam and will need to accept any and all consequences for that choice.

3. If the absence is a result of a protracted illness, you should follow the procedure for obtaining a letter from the Office of the Dean of Students. The request may be made once the student recovers but not more than 10 business days after the date of absence.

4. Information about final exams can be found in the Student Code: http://studentcode.illinois.edu/.
Final Exam Conflict

1. Conflict final exams may only be granted for any one of the following situations:
   a) Students with three final exams in a row as defined in Section 82.A.4). Final Examinations of the Code of Policies and Regulations Applying to All Students which can be found at: www.illinois.edu/admin/manual/code/
   b) Students who have two final exams scheduled at the same time. Final conflict exam requests should be made to the course with lower enrollment. Course personnel can assist with information to determine which course this would be.
   c) Students who have a verified personal problem, and who have received written permission to take a conflict final exam from a dean in their college.
   d) Students who have DRES academic accommodations.

2. Students that find themselves in any of the above situations should complete the online Conflict Final Exam Request Form which can be found on the course website. This request must be made by 5:00 pm on the last day of class in order for the request to be granted. Any requests made after this time may not be granted. If a conflict final exam is granted, it may be scheduled at any time during the final examination period and is at the discretion of the instructor or course coordinator.

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The final deadline for Web Gradebook corrections is

5:00 PM, Wednesday, May 3, 2024

No Web Gradebook scores will be altered after this deadline.

Grades

Each course has a grade scale. The grade you earn in the course will be based on the points that you earn. Effort is reflected in points earned. We will adhere to the grade scale when assigning grades in order to avoid capriciousness and to adhere to fairness and equity for all students.

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Laboratory Assessment Policies and Information

1. Exams: Exams will be the same for all lab sections. They will be composed primarily of multiple choice, matching, true/false questions. Material for lecture exams will be drawn from the laboratories, laboratory materials, laboratory manual, and lectures. In accordance with MCB policy, examples of final exams are not posted. Within one week of each exam, answers will be posted, and exams will be handed back to the student. It is the student's responsibility to make certain that the grade on the Web Gradebook is correct. If a student
believes that an error has been made, he/she should follow the instructions on the “Procedure for Re-grades” found in the lab manual and on the course website. All re-grades need to be submitted to Renee Alt in 232 Burrill Hall within one week of the date the assignment or exam was returned. All students are urged to keep their exams until a final grade has been issued for the course.

The final exam is the property of the course and is not returned to students nor are answers posted or made available in any way. Should a student feel that an error has been made in the grading of the final exam, that student should contact Renee Alt.

2. **Final Exam:** There is no cumulative final exam for this course. The final exam is scheduled during finals week to allow students more time to complete the exam. Material to be covered on the final exam is specified in the course syllabus.

3. **Homeworks** are worth 30 points each and are to be completed online using the Canvas system **BY 11:59pm OF THE SPECIFIED DATE.** Students will not be able to access the homework questions after the given deadline. Students may use any computer to access and complete the homework assignment and are not limited to those in the MCB Learning Center. The purpose of the homework is to ensure that you have prepared properly for the lab, have a good grasp of its purpose, prepare for exams and, perhaps, the labs expected results. Homework questions may include those relating to background material, protocol, purpose of the exercise, proper safety procedures for the day, and/or expected results. **There will be no make-up homeworks given.** A missed homework will be counted as a zero.

4. **Lab Notebooks/Protocols:** Lab notebooks/protocols need to be typed and completed as outlined in the section “Laboratory Notebook Assignments” of this lab manual and should include all of the information specified in the “Lab Notebook Assignment” description in the manual, handouts that are given and instructions from your section TA.

The schedule of lab notebook due dates is included in the course syllabus and on the course website. Lab notebook assignments are due in CANVAS on their individual due dates. Any late lab notebooks will be handled according to the table below:

1 minute to 48 hours late = Full Credit for 1 late lab report per semester
Over 48 hours late = 0

<table>
<thead>
<tr>
<th>Due Dates for Late Lab Notebooks</th>
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<tbody>
<tr>
<td>Due on Monday</td>
<td>Due by 5:00pm on Wednesday</td>
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<tr>
<td>Due on Tuesday</td>
<td>Due by 5:00pm on Thursday</td>
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<tr>
<td>Due on Wednesday</td>
<td>Due by 5:00pm on Friday</td>
</tr>
<tr>
<td>Due on Thursday</td>
<td>Scanned copy emailed to Renee Alt by 5:00pm on Saturday, paper copy due by 5:00pm on Monday</td>
</tr>
</tbody>
</table>

19
a) All late lab notebooks are to be turned into Renee Alt in 232 Burrill Hall by the day and time listed above. **Do not turn in late notebooks to your TA.**

b) For unexcused absences (including unexcused absences for tardiness of later than 30 minutes), lab notebooks must be turned in before the due date in order to receive credit for the assignment. If you have an unexcused absence the day a notebook is due you will receive a “0” for that assignment if not turned in early. You will also not be able to use the “one late assignment policy” for these assignments.

c) If you have an *excused* absence, lab notebooks are due at the time the student and Ms. Alt agree. Notebooks turned in late due to an unexcused absence will be scored as indicated above in section 4b.

d) Each student will be allowed to turn in one late lab notebook assignment without penalty, provided they are submitted within 48 hours of the original due date.

5. **Computer-based Assignment:** There will be one computer-based assignment (Growth Curve) that will be provided as a supplement to the lab manual. The due date for this assignment is given on the course syllabus.

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**Laboratory Notebook Assignments/Protocols**

All MCB 101 students are required to keep a laboratory notebook. Blank pages have been added to this manual for that purpose. Full lab notebook assignments will typically be collected one week after completion of the exercise or per your TA’s instructions. Instructions on what to include in each assignment are given in CANVAS. Total point values are noted there as well. **Please note that though an itemized list of report components is given in the lab manual, the format of the report can be found in CANVAS. Your TA will also go over in detail what is expected before the first lab report is due.**

Your notebook is a personal record of your work and keeping it thorough and neat is an essential part of your scientific research.

The **organizational format** that should be used in your notebook throughout the semester will be explained to you by your section TA before your first lab notebook is due.

**Student Evaluations**

At the end of the semester, your TA will complete an evaluation of your laboratory performance, which will include observations of the following:
• Missed or unexcused labs, experiments not performed
• Punctuality and preparation for lab (pre-labs, background reading)
• Microbiological technique and organization in lab, carefulness in working
• Ability to work well with others, sharing of work with your lab partner
• Quality of data you obtained
• Demonstrated interest in the subject

The written evaluations will aid in the preparation of recommendation letters for those requesting them. No recommendation letters will be written prior to the last 2 weeks of class.

Procedure for Re-grades

If you believe that an answer was improperly graded on an exam, or lab assignment you must print a copy of the “Request for Exam Re-grade” form available on the “Forms” link on the course website. This form must be completed and attached to the front of the original paper. Please note that paper assignments cannot be accepted for regrading if they are scanned and emailed. The regrade form must also be completed for web-based assignments but these may be emailed to Renee Alt. Please be sure to indicate the number of the question(s) involved and why your answer is correct. Do not make any additional comments or marks on the original exam or lab assignment. Properly completed re-grade requests should be given to Renee Alt (232A Burrill Hall).

All requests for re-grades must be made within one week of the day that the graded paper was returned. An exception is made at the end of the semester due to final grades needing to be completed. Any assignments that are still outstanding at the end of the semester will be due by 5pm on December 11th. The grader has the option to leave the score as is and comment further on the answer in question, accept the argument presented and award additional points or lower the original score if he/she finds additional mistakes that were missed during the first round of grading. The paper will be re-evaluated and returned to you within two weeks of the assignments regrade due date.

Hourly exams given during the semester will be returned to the students when grading is complete and therefore are property of the student. Final exams will not be returned to the student and will remain the property of the course, nor will answer keys be posted or made available in any way. Students may make an appointment with Renee Alt in order to view the final but it will stay in the procession of MCB staff. Final exams will not be subject to the MCB 101 regrade procedure, concerns should be directed to Renee Alt.

Academic Integrity

1. Science cannot exist without honesty. The faculty and staff in MCB require students, as scientists-in-the-making, to hold the highest standards of scientific and academic conduct. Any form of cheating on any graded work in courses is unacceptable, and
will be dealt with as outlined below, and in accordance with the University-wide standards in the Code of Policies and Regulations Applying to All Students.

2. We require that all graded work be entirely your own, and that anything you write using the words of other writers be correctly attributed. Some specific points follow.

3. On exams, the answers that your turn in for grading must be your own, formulated during the exam from your own understanding of the material and without any supporting information, be it written, verbal or electronic. Copying the work of another student, or allowing another to copy your work, or copying work from any other source, is unacceptable. Since we cannot always monitor you as you complete your work, we must rely upon appearance of your work from which to judge. If the work you submit resembles that of another student or another source too closely, we may conclude that it was not your original work. Always make a conscious effort to complete your work on your own and to protect it from the view of others, in order to ensure that it will be seen as your own. Failure to adhere to these standards for any portion of an exam may result in a grade of zero for the entire exam or quiz for all persons involved.

4. Texting, or the use of a cell phone for any purpose, during a quiz or exam is prohibited. Doing so may earn you a zero or a more extreme penalty on the quiz or exam at the discretion of the instructor.

5. Use of any social or electronic media to share information, request information or make confidential information public is prohibited. Any use of this type may earn you a zero on the exam or a more extreme penalty at the discretion of the instructor.

6. On written or electronic assignments, the answers that you turn in for grading must be written in your own words, formulated from your own understanding of the material. While you may be working with other students in the course, you must formulate and submit your own answers. Copying or paraphrasing the work of another student, or allowing another to copy or paraphrase your work, is unacceptable. Since we cannot monitor you as you complete your work, we have only the appearance of your work from which to judge. If the work you submit resembles that of another student too closely, we may conclude that it was not your original work. Always make a conscious effort to complete your work on your own and to protect it from the view of others, in order to ensure that it will be seen as your own. You must also make a conscious effort to protect your passwords and
accounts. Failure to adhere to these standards may result in a grade of zero for the entire assignment for all persons involved.

7. On written or electronic assignments, if you use a statement taken directly from any book or other publication, including the course textbook, you must provide a citation. That is, you must put the text in quotes and put the author of the publication in parentheses after the quotation. Failure to do so will result in zero credit for that answer. Further, using only the words of another author as your entire answer or as the majority of your answer to any question is never sufficient to earn credit. If the majority of your work has been taken directly from a publication, you are likely to receive no credit for the work, since you would not be demonstrating knowledge beyond the ability to copy. Even if you quote another, your answer must be substantially your own words, drawn from your own understanding of the material.
Social Media Use

1. Use of any social or electronic media to share course information, request course information or make confidential course information public is prohibited. Any use of this type may earn you a zero or a more extreme penalty at the discretion of the instructor on an assignment or exam.

2. Any social media sites created in relation to MCB courses must grant access to course personnel upon request. Failure to provide access will result in a failing grade in the course for the group/site’s administrator(s).

3. No electronic devices, including smart watches, are allowed at exams.

Course Recordings

1. Students are welcome and encouraged to make audio recordings of course lectures.

2. The material recorded is intellectual and copyrighted property of the University of Illinois Board of Trustees and may be made for personal use only.

3. Video recordings of any kind are strictly prohibited.

4. Posting of audio recordings or transcriptions on social or electronic media platforms is strictly prohibited.

5. Posting or redistributing of course material in any format is strictly prohibited.

University Information on Student Safety - Active Threats:

- General Emergency Response Recommendations (Emergency Response Guide):
- Security Threat. The Department of Homeland Security and the University of Illinois at Urbana-Champaign Office of Campus Emergency Planning recommend the following three responses to any emergency on campus: RUN > HIDE > FIGHT

- Only follow these actions if safe to do so. When in doubt, follow your instincts - you are your best advocate!

- RUN — Action taken to leave an area for personal safety.
  - Take the time to learn the different ways to leave your building before there is an emergency.
  - Evacuations are mandatory for fire alarms and when directed by authorities! No exceptions!
• Evacuate immediately. Pull manual fire alarm to prompt a response for others to evacuate.
• Take critical personal items only (keys, purse, and outerwear) and close doors behind you.
• Assist those who need help, but carefully consider whether you may put yourself at risk.
• Look for Exit signs indicating potential egress/escape routes.
• If you are not able to evacuate, go to an Area of Rescue Assistance, as indicated on the front page of this plan.
• Evacuate to Evacuation Assembly Area, as indicated on front page of this plan.
• Remain at Evacuation Assembly Area until additional instructions are given.
• Alert authorities to those who may need assistance.
• Do not re-enter building until informed by emergency response personnel that it is safe to return.
• Active Threat: IF it is safe to do so, run out of the building. Get as far away as possible. Do NOT go to the Evacuation Assembly Area.

• HIDE — Action taken to seek immediate shelter indoors when emergency conditions do not warrant or allow evacuation.
  • Severe Weather:
    • If you are outside, proceed to the nearest protective building.
    • If sheltering-in-place due to severe weather, proceed to the identified Storm Refuge Area or to the lowest, most interior area of the building away from windows or hazardous equipment or materials.
  • Active Threat:
    • Lock or barricade your area.
    • Get to a place where the threat cannot see you.
    • Place cell phones on silent.
    • Do not make any noise.
    • Do not come out until you receive an Illini-Alert advising you it is safe.

• FIGHT — Action taken as a last resort to increase your odds of survival.
  • Active Threat: If you cannot run away safely or hide, be prepared to fight with anything available to increase your odds for survival.

Student Resources/Where to go for Help:
We Care at Illinois:
• For sexual misconduct support, response and prevention visit: wecare.illinois.edu

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here:
Safety and Emergency
*University Police Department, Emergency, 9-911; Non-emergency, 217-333-8911*
University Fire Department Emergency, 9-911
Crisis Line, 217-359-4141
Emergency Dean, 300 Turner Student Services Bldg., 610 E. John St., 217-333-0050
Counseling Center, 110 Student Services Bldg., 610 E. John St., 217-333-3704
McKinley Health Center, General Information, 217-333-2701
McKinley Mental Health Center, 1109 S. Lincoln, 217-333-2705
Dean of Students, 300 Turner Students Services Bldg., 610 E. John St., 217-333-0050
Local Sexual Assault Center, RACES, 217-384-4444
Women’s Resources Center, 703 South Wright Street, 2nd Floor, 217-333-3137
Rape Crisis 24-hour Hotline, 217-384-4444
Suicide & Psychological Emergency, Suicide Prevention Team, 217-333-3704
SafeRides (free nighttime campus ride program), 217-265-RIDE (265-7433)
SafeWalks (free walking escort service by Student Patrol), 217-333-1216

Student Services and Advocacy
Office of the Dean of Students, 300 Student Services Bldg., 610 E. John St., 217-333-0050

Classroom Support, Teaching Skills, and Instructional Strategies
Center for Innovation in Teaching & Learning, 249 Armory Building, 217-333-1462

Counseling Services
Counseling Center, 110 Student Services Bldg., 610 E. John St., 217-333-3704
McKinley Mental Health Center, 1109 S. Lincoln Ave., 217-333-2701
Psychological Services Center, 3rd Floor, 505 E. Green St., 217-333-0041

Disability Services
Disability Resources and Educational Services (DRES), 1207 S. Oak St., 217-333-1970

Lesbian, Gay, Bisexual, Transgender Resource Center
LGBT Resource Center, 323 Illini Union, 1401 W. Green St., 217-244-8863

Veterans Services
Veteran Student Support Services, Office of the Dean of Students, 610 E. John St., 217-333-0050
Center for Wounded Veterans in Higher Education, 908 W. Nevada St., 217-300-3515

General Study Skills Assistance
Office of Minority Student Affairs, 130 Student Services Bldg., 610 E. John St, 217-333-0054
Office of Minority Student Affairs Tutoring Services, 701 S. Gregory Dr., Suite 1, 217-333-7547
Writer’s Workshop, 251 Undergraduate Library, 1402 W. Gregory Dr., 217-333-8796
**Additional academic assistance may be available through individual departments**

Health Resources
Health Education, McKinley Health Center, 1109 S. Lincoln Ave., 217-333-2701
Alcohol & Other Drug Office, 2nd Floor Counseling Center, 610 E John St., 217-333-7557
Sexual Health Educator, McKinley Health Center, 1109 S. Lincoln Ave., 217-333-2714
Dial-A-Nurse, McKinley Health Center (24-hour), 1109 S. Lincoln Ave., 217-333-2700
Health Resource Center, McKinley Health Center, 1109 S. Lincoln Ave., 217-333-6000
Health Resource Center, Room 40 Illini Union, 1401 W. Green St., 217-244-5994
McKinley Health Center, General Information, 1109 S. Lincoln Ave., 217-333-2701
Sexual Harassment/Assault & Acts of Intolerance/Hate Crimes
Office of the Dean of Students, 300 Students Services Bldg., 610 E. John St., 217-333-0050