Course Overview and Description

This laboratory is designed to teach concepts and experimental methods in cell biology. Biochemical, immunological and molecular biological techniques will be used to probe the molecules and processes of eukaryotic cells. Special emphasis will be given to the cell cycle, cytoskeleton and intracellular trafficking. The course will cover proper data handling and reporting techniques.

Course Prerequisites

Prior completion of MCB 252 and MCB 253 or instructor approval. Prior completion of MCB 354 is recommended.

Student Learning Outcomes

At the end of the course, through assignments, discussions, activities and assessments, students will be able to:

- Design scientific experiments using cell culture as a model.
- Become proficient at basic techniques in cell biology beyond what they have learned in MCB 253.
- Work effectively as part of a research team.
- Analyze data and communicate in both written and verbal forms their experimental results.
- Describe the structure and function of the cell organelles.
- Critically analyze data from both scientific literature and their own experiments.
- Think about the whole cell when designing experiments.
Expectations:

- You are expected to read the assigned reading/videos prior to each class.
- You are expected to get familiar with each of the protocols and techniques prior to each lab.
- You are expected to participate in weekly laboratories.
- Students are expected to attend the weekly labs (4 hrs), devote at least 1-2 hrs per week learning the topics of the course through video lectures and readings, and at least 3-5 additional hours per week on homework assignments and class projects.

Topics covered:

Module 1: Basic Cell Culture Techniques
Module 2: Cell Cycle and Cell toxicity
Module 3: Cellular Differentiation

Required Text

- Karp’s Cell and Molecular Biology, 9th ed
  Janet Iwasa and Wallace Marshall
  Wiley
- Experimental Cell Biology Lab Manual (Fall 2021)

Course Links:

- MCB 364 Course Website: http://www.life.illinois.edu/mcb/364
- MCB 364 Course Moodle: learn.illinois.edu
- MCB364 Course LonCapa (homework): https://lon-capa.illinois.edu/adm/login

Grading Information and Breakdown

- **Weekly assignments:** Individual students will need to complete weekly assignments using LonCapa that will cover topics in basic cell biology and methodologies. These assignments will be used to both encourage students to complete the required reading and to test their analytical skills. These questions will also serve as practice for the midterm and final exam. A total of six weekly assignments will be administered each worth 50 points. Each assignment has a set opening and closing date. Once the exercise is closed, the answers are posted. We do not let students make up missed assignments once the answers are made available. Only five of the six assignments will be used in the final grade calculation. The assignment with the lowest score will be dropped before the final grade calculation. This policy allows students to miss assignments due to illness or other excusable absences, including late registration, without being penalized. It is however also our policy to prorate these assignments if a student misses more than the allowable number of drops when all of their drops are due to excusable reasons. Please
note that computer or internet problems are not excusable reasons for missing question submissions or assignment deadlines (ie., you will not be given credit for or the ability to make-up assignments because of computer issues).

Unless otherwise specified, these assignments are to be completed individually and NOT as a group. Your answers must be in your own words. No copying or slightly changing the wording from printed or online material, or from another student is allowed and may result in a grade of zero for that assignment. All assignments will need to be completed in LonCapa. Assignments will be due at 9 am on the day of class. You will be allowed only one late assignment during the semester if you have an acceptable excuse. You must request the extension no later than 24 hrs prior to the closing date and the late assignment needs to be completed within 48 hrs of the original due date. Once the assignment is closed, the answers will be shown and no extension or retaking of the assignment will be possible.

**Checkpoints:** There will be four checkpoints due throughout the first three modules, each worth 50 pts. These checkpoints will be based on the background work each student needs to complete towards designing their group research project to be executed in Module 4. These checkpoints will ensure that students are making satisfactory progress in planning their group project and will include: selection of a project question, review of the literature, summary of the literature search, formulation of a hypothesis, and formulation of the experimental design. Most of these checkpoints can be submitted as a group unless otherwise indicated. One component of the experimental design will be to select the reagents and techniques needed to complete the project, and the second component will be the selection of proper controls to include in their experimental designs (negative and positive), which will allow them to make the appropriate conclusion of their results.

Students will be given a list of reagents and techniques available to complete their projects. Students will need to design their project within the monetary and time constraint of the laboratory period.

**Lab Participation:** There will be 5 points given each week of the first three modules (for a total of 50 pts.) for participation based on a student level of involvement in the laboratories. Any unexcused absence from a lab period will result in the automatic loss of 25 pts for participation.

**Project Participation:** There will be 50 points given based on each student contribution to their individual project. A portion of this grade will be assessed by your lab partner.

**Research paper:** Each individual student will need to write a research paper based on their group research project, which will be due at the beginning of week 14. This paper should be written in the format of a short scientific manuscript and include the following: Abstract, Introduction, Methods, Results, Discussion and References.

**Oral presentation:** Students will do a group presentation of their research project executed during module 4 in the form of a Powerpoint presentation within the context of a mini-
symposium. Students will be assessed on the content and delivery of the presentation as well as on their ability to answer questions about their project. Each presentation will be limited to 10 minutes long followed by a 5-minute question period.

**Midterm Exam:** The midterm exam will be multiple-choice and completed using LonCapa. Material for the exam will be drawn from the first five laboratories, laboratory materials, and associated text readings.

**Final Exam:** The final exam will contain both multiple-choice and short answer questions emphasizing techniques covered in weeks 6 to 11 to be completed on LonCapa. The multiple-choice questions will be used to assess their knowledge of cell biology and methodology content. The short answer questions will test the students' analytical abilities. Material for the exam will be drawn from the laboratories, laboratory materials, and associated text readings. Material for the final exam can be drawn comprehensively from all material covered in the first three modules of 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 Dr. Lévesque.

**Course Grading:**

Student grades in MCB 364 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>Assignment</th>
<th>Points each</th>
<th>Percent each</th>
<th>Number</th>
<th>Total points</th>
<th>Total percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Assignments</td>
<td>50</td>
<td>5</td>
<td>5</td>
<td>250</td>
<td>25</td>
</tr>
<tr>
<td>Checkpoints</td>
<td>50</td>
<td>5</td>
<td>4</td>
<td>200</td>
<td>20</td>
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<tr>
<td>Lab Participation</td>
<td>50</td>
<td>0.5</td>
<td>10</td>
<td>50</td>
<td>5</td>
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<tr>
<td>Project Participation</td>
<td>50</td>
<td>5</td>
<td>1</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>Paper</td>
<td>100</td>
<td>10</td>
<td>1</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Oral presentation</td>
<td>50</td>
<td>5</td>
<td>1</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>Midterm</td>
<td>100</td>
<td>10</td>
<td>1</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
<td>15</td>
<td>1</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>1000</strong></td>
<td><strong>100</strong></td>
<td></td>
<td><strong>1000</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

All point totals are estimates and may be altered slightly throughout the course of the semester.

**The final deadline for Moodle Gradebook corrections is 5:00 PM, Wednesday, December 9th, 2021.**

No gradebook scores will be altered after this deadline.
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 1000 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 364 Gradebook:**

Scores on exams, papers, homework, checkpoints, presentations and participation will be available for student review directly in the Moodle gradebook. All students are responsible for checking their scores on the Moodle Gradebook after each assessment is returned to them. Each student is responsible for reporting possible discrepancies to the attention of Dr. Levesque **within one week** of receiving their graded assessment score. Students are encouraged to keep an electronic copy of their assignments until after the final grades are issued.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Point Ranges</th>
<th>Grade Point Value</th>
</tr>
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<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>
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<tr>
<td>D+</td>
<td>649–617</td>
<td>1.333</td>
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<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>
</tr>
</tbody>
</table>
# MCB364 Course Calendar

## Module 1- Basic Cell Culture Techniques

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics and Techniques</th>
<th>Required Readings/Viewing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2: Phenol red as a pH indicator</td>
<td>Videos – Intro to working with mammalian cell lines</td>
</tr>
<tr>
<td></td>
<td>1.3: Assessment of contamination</td>
<td>Karp’s:</td>
</tr>
<tr>
<td></td>
<td>1.4: Assessing confluency using Image J</td>
<td>Chapt 1 (up to section 1.3 incl.)</td>
</tr>
<tr>
<td></td>
<td>1.5: Comparing cell size using Image J</td>
<td>Chapt 2 – section 4</td>
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<tr>
<td></td>
<td></td>
<td>Chapt 18 (sections: #1 and #5)</td>
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<tr>
<td></td>
<td></td>
<td><strong>Assignment Due</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete Orientation exercise using Flipgrid</td>
</tr>
<tr>
<td></td>
<td><strong>Assignment Due</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept 1/3</td>
<td>2.1: Trypsinizing CHO-K1 cells</td>
<td>Karp’s:</td>
</tr>
<tr>
<td></td>
<td>2.2: Cell counting with a hemocytometer</td>
<td>Chapt 16. intro + section 16.1</td>
</tr>
<tr>
<td></td>
<td>2.3: Cell counting with an automated cell counter</td>
<td>Chapt. 7.3 (Integrins and Focal adhesions only)</td>
</tr>
<tr>
<td></td>
<td>2.4: Cryopreservation</td>
<td>Videos: Passing cells using sterile techniques and cryopreservation.</td>
</tr>
<tr>
<td></td>
<td>2.5: Subculturing</td>
<td><strong>Assignment Due:</strong></td>
</tr>
<tr>
<td></td>
<td>2.6: Cell dilution</td>
<td>Homework 1</td>
</tr>
<tr>
<td></td>
<td>2.7: Observing flasks from last week</td>
<td></td>
</tr>
<tr>
<td><strong>Week 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.2: Shuttling assays</td>
<td>Karp’s:</td>
</tr>
<tr>
<td></td>
<td>3.3: Transfection of CHO-K1 cells with GFP-lamin and GFP by electroporation.</td>
<td>Chapt 4 (sections: 4.1 to 4.6 (to page 172)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapt 12:section 12.3</td>
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<tr>
<td></td>
<td></td>
<td>Chapt 18: (sections: 18.12 and 18.16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapt 8, (section 8.2, pages 312-313)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Videos - Cell immunolabeling and Transfection</td>
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<tr>
<td></td>
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<td><strong>Assignments Due:</strong></td>
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<tr>
<td></td>
<td></td>
<td>o  Homework 2</td>
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<tr>
<td></td>
<td></td>
<td>o  Checkpoint 1- Topic Selection and Literature Search</td>
</tr>
</tbody>
</table>
| Week 4  | Sept 15/17 | 4.1: Standard Immunofluorescence  
4.2: Selective Permeabilization with digitonin | **Karp's:**  
Chapt 8, (section 8.3)  
Chapt 18: (section 18.18)  
**Videos:** Using antibodies for IF and GFP detection.  
**Assignment Due:**  
Checkpoint 2- Literature Review |
| --- | --- | --- | --- |

### Module 2- Cell Cycle

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics and Techniques</th>
<th>Required Readings/Viewing</th>
</tr>
</thead>
</table>
| **Week 5** | 5.1: Immunofluorescence (IF) of NIH-3T3 cells for cyclin B1 and alpha-tubulin.  
5.2: Pulse Click-iT labeling of NIH-3T3 cells. | **Karp's:**  
Chapt 14, sections 14.1 and 14.2  
Chapt 9, section 9.5  
**Videos:** Cell cycle review, cell synchronization and Click-iT labelling.  
**Assignment Due:**  
Checkpoint 3- Hypothesis and Project Design |
| Sept 22/24 | ---  
**--- Midterm ---**  
Open Lab/ Project discussion |
| **Week 6** | 7.1: Measuring the adhesion properties of various ECM substrates  
7.2: Comparison of cell proliferation rate between two cell lines | Checkpoint 3- Hypothesis and Project Design |
| **--- Midterm ---**  
Open Lab/ Project discussion | | |
| **Week 7** | 8.1: Cell Viability measured by XTT assay  
8.2: Apoptosis/necrosis assay | **Karp's:**  
Chapt 3, section 3.3  
Chapt 15 section 15.10  
**Videos:** Apoptosis and cell toxicity assays  
**Assignment Due:**  
Homework 4 |
<p>| Oct 6/8    | | |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Topics and Techniques</th>
<th>Required Readings/Viewing</th>
</tr>
</thead>
</table>
| **Week 9**   | 9.1: Immunofluorescence and phalloidin staining of differentiated vs. undifferentiated C2C12.  
               | 9.2: Harvest differentiated vs. undifferentiated C2C12 cells for Western blot analysis.  
               | 9.3: BCA protein assay                                                                  | **Karps:**  
               | 9.4: Plate and differentiate NSC34 cells for the following lab.                          | Chapt 9 intro, sections 9.1, 9.2, 9.8, 9.9, and 9.12.  
               |                                                                                       | Chapt 18, section 7 (protein gel electrophoresis only)                                    |
| Oct 20/22    |                                                                                       | **BCA protein assay pamphlet**                                                           |
|              |                                                                                       | **Videos:** Muscle differentiation                                                       |
|              |                                                                                       | **Assignment Due:** Checkpoint 4- Project Procedures                                     |
| **Week 10**  | 10.1: Immunofluorescence of differentiated NSC34.                                      | **Video**-Western Blot                                                                  |
| Oct 27/29    | 10.2: SDS-PAGE of C2C12 cell extracts from Exercise 9.2.                                | **Karp:** Chapt 18 pgs. 837-839 (SDS-page)9,  
               | 10.3: Western blot transfer of C2C12 extracts.                                          | Chapter 9, section 9.7  
               |                                                                                       | **Videos:** Western blotting                                                               |
|              |                                                                                       | **Assignment Due:** Revised Checkpoint 4                                                  |
|              |                                                                                       | **Assignment Due:** Checkpoint 4- Project Procedures                                     |
| **Week 11**  | 11.1: Western blot development of C2C12 extracts.                                      | **Videos:** Neuronal differentiation                                                     |
| Nov 3/5      | 11.2: Neurite measurements.                                                            | **Assignment Due:** Homework 5                                                            |
## Module 4- Individual Project

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics and Techniques</th>
<th>Required Readings/Viewing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 12</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 10/12</td>
<td>Student group project execution</td>
<td><strong>Assignment Due:</strong></td>
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<tr>
<td></td>
<td></td>
<td>Last day to submit Material Request form for your project</td>
</tr>
<tr>
<td><strong>Week 13</strong></td>
<td></td>
<td></td>
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<tr>
<td>Nov 17/19</td>
<td>- Finish student group project execution</td>
<td><strong>Assignment Due:</strong></td>
</tr>
<tr>
<td></td>
<td>- Student group project analysis</td>
<td>Homework 6</td>
</tr>
<tr>
<td><strong>Week 14</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 1/3</td>
<td>STUDENT Mini-Symposium</td>
<td><strong>Assignment Due:</strong></td>
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<tr>
<td></td>
<td></td>
<td>Oral Presentation</td>
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<tr>
<td><strong>Week 15</strong></td>
<td></td>
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<tr>
<td>Dec 8</td>
<td>No Lab</td>
<td><strong>Assignment Due:</strong></td>
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<tr>
<td></td>
<td></td>
<td>Project paper - 5pm Dec 8</td>
</tr>
</tbody>
</table>

## MCB364 Course policy

### Class Attendance Policies:

- **All laboratory exercises must be completed in order to earn a grade in MCB 364. Late assignments will NOT be accepted.** Assignments must be completed by the due date and time in order to receive credit (LonCapa will prevent you from accessing the material after this time.) Answers not submitted BEFORE the assignment deadline, will be scored as a zero. Refer to the MCB Curriculum Policies for further information about what to do if you must be absent from class or an exam.

- Students must attend their scheduled lab section unless they received permission from Dr. Levesque one week ahead of time.
General Information & Policies of MCB 364 Laboratories

• All students are assumed to have read and understood the Code of Policies And Regulations Applying To All Students, University of Illinois, and will be expected to act accordingly. The Code is available online at: www.illinois.edu/admin_manual/code/

• Concerns over exam grading, lab teaching or grading, and exam or lab absences/conflicts should be addressed to Dr. Lévesque.

• The deadline for grade corrections on all items is one week after corrected items are returned or grades are received.

Inclusivity Statement:
The effectiveness of this course is dependent upon the creation of an encouraging and safe classroom environment. Exclusionary, offensive or harmful speech (such as racism, sexism, homophobia, transphobia, etc.) will not be tolerated and in some cases will be subject to University harassment procedures. We are all responsible for creating a positive and safe environment that allows all students equal respect and comfort. I expect each of you to help establish and maintain and environment where you and your peers can contribute without fear of ridicule or intolerant or offensive language.

MCB Curriculum 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:
• MCB course personnel are more than happy to assist students.
• Emails to the instructor, 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:

- The course rubric in the subject line along with section letter (A-Wednesday’s class or B-Friday’s class)
- Your full first and last name
- Your NetID (the first part of your illinois.edu email account)
- Your UIN (9 digit number that can be found on your ICard)
- The previous email “thread” or previous communicated information pertinent to the situation

• 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.

Adding the Course after the Semester Starts:
• We understand that the University has an add deadline 10 days into the semester, but the University lets individual courses and/or programs determine their policies for late adds. We feel that students who choose to add a course late do so at their own discretion with knowledge that there may be points lost in the process.

Religious Observances and Practices:
• Students are required to submit the Request for Accommodation for Religious Observances Form (which can be found at www.odos.illinois.edu/.../Religious_Observance_Accommodation_Request_Form.docx) 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:
• 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.
• If a student believes that they need DRES accommodations, they should contact DRES at disability@illinois.edu.
**Class Absences:**
- Regular class attendance is expected of all students at the University. ([http://odos.illinois.edu/studentAssistance/absence/revised_code.asp](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.

**Exam Absences:**
- 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 Absence 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.
- 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.
• If you must miss an exam for a conference or job, graduate or professional school interviews, the exam may be prorated. A best effort should be made to schedule these events around exams. You will need to be mindful that only one exam may be prorated in a semester for any and all absences. All will require documentation.

• 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.

• 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.

Exam Conflicts:

• 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.

• 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.

• 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.

• 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.

Final Exam Absence:

• 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.
• 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.
• 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.
• Information about final exams can be found in the Student Code: http://studentcode.illinois.edu/

Final Exam Conflict:
• Conflict final exams may only be granted for any one of the following situations:
  o Students with three final exams scheduled within a 24 hour period 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/
  o Students who have two final exams scheduled at the same time. Final conflict exam requests should be made to the course with larger enrollment. Course personnel can assist with information to determine which course this would be.
  o 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.
  o Students who have DRES academic accommodations.
• 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.

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.

Academic Integrity:
• The Code of Policies and Regulations Applying to All Students will be applied in all instances of academic misconduct committed by students. This applies to all exams, presentations, assignments and materials distributed or used in this course. You can review these policies at the following website: http://admin.illinois.edu/policy/code/index.html and specifically here: http://studentcode.illinois.edu/article1/part4/1-401/
• 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.

• 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.

• 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.

• Texting, or the use of a cell phone or any other device 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.

• 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.

• 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.

• 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.

**Electronic Media/Device Use:**

• 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 on an assignment or exam or a more extreme penalty at the discretion of the instructor.

- Any violation of the social media policy on your account may result in a zero on an assignment or exam or a more extreme penalty at the discretion of the instructor.
- 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).
- No electronic devices, including smart watches, are allowed at exams.

Course Material:
- Students are welcome and encouraged to make audio recordings of course lectures.
- The material recorded is intellectual and copyrighted property of the University of Illinois Board of Trustees and may be made for personal use only.
- Video recordings of any kind are strictly prohibited.
- Posting of audio recordings or transcriptions on social or electronic media platforms is strictly prohibited.
- Posting or redistributing of course material in any format is strictly prohibited.

University Information of 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: [http://olir.illinois.edu/sites/prod/files/SexualMisconduct_ResourceGuide.pdf](http://olir.illinois.edu/sites/prod/files/SexualMisconduct_ResourceGuide.pdf)*

**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

The Office of Diversity, Equity and Access (ODEA):
  • For non-academic support visit: diversity.illinois.edu
    o Discrimination & Harassment Prevention
    o Title IX
    o Accessibility & Accommodations
    o Inclusive Illinois