Instructors/Instructional Team

Dr. Lin-Feng Chen  
Office Hours: Wednesday, 1-2PM, online (Zoom link on course website)  
Email: mcb450help@life.illinois.edu

Dr. Rudy Fratti  
Office Hours: Wednesday, 1-2PM, online (Zoom link on course website)  
Email: mcb450help@life.illinois.edu

Elizabeth Good, Course Coordinator, MCB 450  
175 Burrill Hall  
Office hours: By appointment  
Office: 217-244-0546  
Email: blinstru@illinois.edu

Class Meeting Schedule
- Online Lecture, asynchronous (pre-recorded lecture videos)

Course Overview and Description

Chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, vitamins, and coenzymes and their relation to the regulation and processes of organisms, cells, and subcellular components.

Course Prerequisites
- Credit is not given for both MCB 450 and MCB 354.  
- Prerequisite: CHEM 232 or CHEM 236, or equivalent, or consent of instructor.  
- Not intended for students in the MCB or Biochemistry curricula.
Text/Materials Information (required)

- The course textbook is available as an E-book, Loose-leaf or Paperback version. You may choose whichever version you prefer.
- The book is on reserve in both the Undergraduate Library and the Chemistry Library.
- You will also need a non-graphing scientific calculator for the exams and problem sets. NO graphing or programmable calculators will be allowed at the exams.

Course Website, Course Tools

- MCB 450 Course Website: https://www.life.illinois.edu/mcb/450
- Lecture videos and slides will be posted on the course website under the “Lecture Material” link.
- You will log into password protected areas of the course website using your NetID and Active Directory Password.
- Assignments will be completed in LON-CAPA. You will log into LON CAPA using your NetId and Active Directory Password.

Grading Information and Breakdown

- Student grades in MCB 450 will be based on a total of 1000 points.
- 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 letter grade scale when assigning final grades in order to avoid capriciousness and to adhere to fairness and equity for all students.
- Course assignments will be administered in LON-CAPA.
- Categories listed below are approximate, but should closely resemble the final point distribution. All point totals are estimates and may be altered slightly throughout the course of the semester.

<table>
<thead>
<tr>
<th>Point Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3 Exams (@150 points each)</strong></td>
</tr>
<tr>
<td><strong>Final Exam (non-cumulative)</strong></td>
</tr>
<tr>
<td><strong>Assignments</strong></td>
</tr>
<tr>
<td>- <strong>Homework</strong>- 300 points total (11 x 30pts, drop lowest score)</td>
</tr>
<tr>
<td>- <strong>Pre-lecture Questions</strong>- 100 points total (21 x 6pts, max. of 100 pts will count toward final grade)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
This course will use the University-assigned grade point values for each letter grade (see table below). MCB 450 will use the plus/minus system, and 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 as a whole), but will not increase, the points needed for each letter grade.

<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>
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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>
Course Policies

MCB Curriculum Policies

All students enrolled in an MCB course are assumed to have read and understood the MCB Curriculum Policies (listed below) and will be expected to act accordingly.

When MCB 450 Classes Begin

MCB 450 will begin on Tuesday, August 24, 2021, at 11:00 AM.

MCB 450 will have pre-recorded lecture videos that will be posted in Illinois MediaSpace. A link will be provided for you on the MCB 450 course website on the “Lecture Material” page. Additionally, lecture slides will be posted in both PPT and PDF versions. All lecture videos will be posted by 11AM on Tuesday and Thursday of each week.

Section Change, Add/Drop Information

Students may use UI Enterprise to add or drop MCB 450 before 5:00 PM, Friday, September, 2021.

Friday, September 3, 2021, at 5:00 PM is the deadline for adding the course and for changing sections in MCB 450.

Friday, October 15, 2021, is the last day to drop the course or to elect the Credit/No Credit option.

To elect the Credit/No Credit option, students must apply in their College Office.

To drop the course after the drop deadline, students must petition a dean in their college office and email petitions to Elizabeth Good for completion of attendance and grade information.

Where To Direct Questions

MCB 450 has a general email mcb450help@life.illinois.edu which is used for course content based questions. This email is sent to all of the MCB 450 staff. An instructor or TA will be answering your content questions on a daily basis. Any course policy questions (absences, conflicts, technology issues) need to be sent directly to Elizabeth Good’s email, blinstru@illinois.edu.
Contacting MCB Course Personnel

MCB course personnel are more than happy to assist students.

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:

- The course rubric in the subject line
- 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 course that you are concerned about (the course personnel often work with multiple courses)
- Your section letter/number
- The previous email "thread" or previous communicated information pertinent to the situation

Your cooperation will help us respond much more quickly to your concerns.
Exam and Conflict Exam Information

Exam Instructions

1. Exams 1, 2, and 3 will be given online in LON CAPA on Thursday evenings (see Course Policies: Examinations for exam dates). Arrive early; the exams will begin at 7:00 PM sharp. The exams will cover material from lecture and discussion. Please see the MCB 450 Web site for any further details concerning each exam.

2. The exams will be administered online in LON CAPA and information will be posted on the MCB 450 Web site several days prior to each exam.

3. We will use Zoom proctoring during the exams. Please have your University photo ID ready.

4. Cell phones, electronic devices, notes, and books are prohibited while taking an exam in MCB 450. You may use a non-graphing calculator during the exam.

5. If you have a University course that conflicts with the exam, use the MCB 450 Conflict Exam Request Form on the MCB 450 Web site to make these arrangements before 5:00 PM the Thursday prior to the exam. See the Conflict Exam Instructions page for further details.

6. If you experience an illness or emergency that causes you to miss an exam, you should refer the MCB Curriculum Policies listed below. If you miss an exam, the possibility exists to have one exam prorated with proper documentation. You must contact the course coordinator via email within 48 hours of the absence. If you do not provide documentation in a timely manner and upon receipt, there may be a negative impact on your ability to receive a prorated score. The final exam cannot be prorated. Your prorate score will be calculated based on the following formula:

\[
\text{Exam A} \times \frac{\text{Percentile of Exam A}}{150} + \text{Exam B} \times \frac{\text{Percentile of Exam B}}{150} + \text{Exam C} \times \frac{\text{Percentile of Exam C}}{150} = \text{Percentile of Exam} = \text{_____ points for Exam______}
\]

(150 + 150 + 150)

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. You must complete at least two exams and the final in this course in order to earn a letter grade in the course. If you are unable to do so, the instructor will recommend that you drop or withdraw from the course.
7. Texting, or the use of a cell phone or any other electronic device for any purpose during an exam, is prohibited. Doing so may earn you a zero on the exam, or a more extreme penalty at the discretion of the instructor.

Conflict Exam Instructions

1. Conflict exams are given online on the regular exam day. You must make arrangements to take a conflict exam by 5:00 PM on the Thursday prior to the exam day. Use the MCB 450 Conflict Exam Request Form on this Web site to make these arrangements. You must make these arrangements for each exam for which you require a conflict—your request for a conflict exam will not be carried to subsequent exams.
2. A Conflict Exam will only be given to individuals who find themselves in one of the following situations:
   - A scheduled course for credit at the University occurring during the scheduled exam
   - Sporting events for University athletes and club team participant
   - Employment (though, if possible the student should reschedule his/her work shift)
   - Students with DRES academic accommodations

Please upload documentation supporting your claim of conflict and a copy of your Illinois Week-at-a-Glance course schedule to the conflict exam request form. If you have a question about whether your conflict will qualify, please email Elizabeth Good before the Thursday prior to the exam at 5pm.
3. Conflict exams are given online. Conflicts will be offered on the same day as the regular exam. If you have a conflict with the regular exam time and the conflict exam times, contact Elizabeth Good by 5:00 PM on the Thursday prior to the exam day. An alternate conflict exam time will be arranged.

Final Exam and Conflict Final Exam Information

Final Exam Instructions

1. The Final Exam time for MCB 450 is Wednesday, December 15, 2021, from 8-10AM.
2. The final exam will be administered online in LON CAPA.
3. We will use Zoom proctoring during the exam. Please have your University photo ID ready.
4. Cell phones, electronic devices, notes, and books are prohibited while taking a final exam in MCB 450. You may use a non-graphing calculator.
5. If you should experience an illness or emergency that prevents you from taking your final exam at the appointed time, you should refer to the MCB Curriculum Policies listed below.

6. A conflict final exam will be given only for students who have met the requirements stated on the Conflict Final Exam Instructions page. Complete and submit a Conflict Final Request Form on the MCB 450 Web site before 5:00 PM on Wednesday, December 8, 2021, to arrange a conflict final exam.

Conflict Final Exam Instructions

1. A Conflict Final Exam will only be given to individuals who find themselves in one of the following situations:
   - 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/
   - Students who have another final exam scheduled at the same time as the MCB 450 Final Exam.
   - Students who have a verified personal problem and who have received written permission to take the MCB 450 conflict final exam from a dean in their college.
   - Students who have DRES academic accommodations.

2. Any student with one or more of the above situations who would like to take a conflict final must submit an MCB 450 Conflict Final Exam Request Form on the MCB 450 Web site before 5:00 PM Wednesday, December 8, 2021.

3. All student requests will be reviewed and students will be contacted as soon as possible via e-mail regarding the status of their request. Following the review of all requests, a conflict exam time and location will be determined, and qualified students will be informed of their eligibility before noon on Thursday, December 9, 2021.
General Information and Policies of MCB 450

1. Zoom etiquette is expected of all students. Please turn your webcam on and mute your microphone while the course faculty or TAs are talking.
2. The course faculty and the TAs are in charge of the orderly conduct in Zoom and may exclude a student who does not comply with a reasonable request in this regard.
3. 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: https://studentcode.illinois.edu/
4. Concerns over the web gradebook or exam absences should be addressed to Elizabeth Good.
5. The deadline for grade corrections on all items is one week after corrected items are returned or grades are received. If you have a score that is incorrectly recorded in the web gradebook, then please contact Elizabeth Good.
6. Excused class time compensating for evening exams is provided by cancellation of lectures/optional review sessions for Exams 1, 2, and 3.
7. Reference letters and recommendation forms are to be submitted to the student's TA, whose evaluation will be reviewed and countersigned by a member of the course faculty.
8. If you experience any technical difficulties throughout the semester, please email Elizabeth Good as soon as possible to inform her of your situation.
9. Audio recordings are permitted—even encouraged—during lectures, but due to copyright and intellectual property issues involving publishing companies and the University of Illinois Board of Trustees, video recordings of any kind are strictly prohibited. If any audio recording, transcription, screen capture, or related distribution of any MCB 450 course material is done via social or electronic media, MCB 450 personnel must be granted access to the group/site upon request. Failure to provide access will result in a failing grade in the course for the group/site's administrator(s).
10. If you choose to attend an exam while suffering from illness or family/personal emergency, and you choose to complete the exam, that exam determines your score.
What To Do If You Must Be Absent

We know that students become ill and that family emergencies arise. In order to accommodate absences due to illness or emergency, we allow that a specified number of assignments may be missed without penalty. These missed assignments can be dropped according to the criteria set forth in the Course Grading for this course. Refer to the MCB Curriculum Policies listed below for further information about what to do if you must be absent from class or an exam.

MCB 450 Web Gradebook

The MCB 450 Web Gradebook can be accessed directly at:

https://apps.atlas.illinois.edu/Gradebook/

Scores on exams and assignments will be available for student review on the MCB 450 Web Gradebook. To check your scores, sign into the MCB 450 Web Site and click on the Gradebook link and follow the instructions presented there. All students are responsible for checking their scores on the Web Gradebook after each exam and assignment is returned to them. Each student is responsible for reporting possible discrepancies to Elizabeth Good within one week of receiving their graded assignment or exam score. Students are encouraged to keep all graded assignments that are returned to them until after final grades are issued.

The final deadline for Web Gradebook corrections is 5:00 PM, Wednesday, December 8, 2021.

No Web Gradebook scores will be altered after this deadline, so please be certain to check all your scores before this time.
Assignments (400 points total)

Point breakdown for assignments:

**Pre-lecture questions**  100 points (21 pre-lectures x 6 points each, earn a maximum of 100 points toward final grade)

**Homework**  300 points (11 homework worth 30 points each, drop lowest score)

- Pre-lecture questions are administered in LON CAPA.
- Pre-lecture questions are due at 11:00am on Tuesday and Thursdays. The first set of pre-lecture questions is due at 11am on Thursday, August 26, 2021.
- Homework assignments will open in LON CAPA at 5pm on Monday and be due the following Monday at 5pm (see schedule below).
- Homework assignments are worth 30 points each. You may drop your lowest homework score at the end of the semester.

The schedule for the weekly homework assignments is listed below:

<table>
<thead>
<tr>
<th>Homework</th>
<th>Open Date</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>Monday, Aug. 23 at 5pm</td>
<td>Monday, Aug. 30 at 5pm</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>Monday, Aug. 30 at 5pm</td>
<td>Tuesday, Sept. 7 at 5pm (\text{(Deadline extended one day because LABOR DAY is Monday, 9/8.)})</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>\textbf{Tuesday, Sept. 7 at 5pm}</td>
<td>Monday Sept. 13 at 5pm</td>
</tr>
<tr>
<td>Assignment 4</td>
<td>Monday, Sept. 20 at 5pm</td>
<td>Monday, Sept. 27 at 5pm</td>
</tr>
<tr>
<td>Assignment 5</td>
<td>Monday, Sept. 27 at 5pm</td>
<td>Monday, Oct. 4 at 5pm</td>
</tr>
<tr>
<td>Assignment 6</td>
<td>Monday, Oct. 4 at 5pm</td>
<td>Monday, Oct. 11 at 5pm</td>
</tr>
<tr>
<td>Assignment 7</td>
<td>Monday, Oct. 18 at 5pm</td>
<td>Monday, Oct. 25 at 5pm</td>
</tr>
<tr>
<td>Assignment 8</td>
<td>Monday, Oct. 25 at 5pm</td>
<td>Monday, Nov. 1 at 5pm</td>
</tr>
<tr>
<td>Assignment 9</td>
<td>Monday, Nov. 1 at 5pm</td>
<td>Monday, Nov. 8 at 5pm</td>
</tr>
<tr>
<td>Assignment 10</td>
<td>Monday, Nov. 15 at 5pm</td>
<td>Monday, Nov. 29 at 5pm</td>
</tr>
<tr>
<td>Assignment 11</td>
<td>Monday, Nov. 29 at 5pm</td>
<td>Monday, Dec. 6 at 5pm</td>
</tr>
</tbody>
</table>

**NOTE:** There are no homework assignments due on the Mondays following an exam week (9/20, 10/18, 11/15).
Examinations (600 points total)

There will be three exams and a final exam worth 150 points each.

Exams will be administered online in LON CAPA using Zoom proctoring. Evening exams and the final exam will be in the multiple choice and/or true-false format. Material for evening lecture exams and the final will be drawn from the lecture materials, associated text readings, and LON CAPA assignments.

All exam grades are entered into the Web Gradebook electronically. Once the exams have been administered, they become property of the students (except for the final exam which is secure—see below). Within one week of each exam, answers are posted in LON CAPA, and grades are posted in the Web Gradebook. 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, it should be brought to Elizabeth Good’s attention in writing via email.

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 Elizabeth Good via email.

EXAM DATES (Online in LON CAPA with Zoom Proctoring)

<table>
<thead>
<tr>
<th>Exam</th>
<th>Time</th>
<th>Day</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>7-9 PM</td>
<td>Thursday</td>
<td>Sept. 16, 2021</td>
</tr>
<tr>
<td>Exam 2</td>
<td>7-9 PM</td>
<td>Thursday</td>
<td>Oct. 14, 2021</td>
</tr>
<tr>
<td>Exam 3</td>
<td>7-9 PM</td>
<td>Thursday</td>
<td>Nov. 11, 2021</td>
</tr>
<tr>
<td>Final Exam</td>
<td>8-10AM</td>
<td>Wednesday</td>
<td>December 15, 2021</td>
</tr>
</tbody>
</table>
COURSE GRADING

Student grades in MCB 450 will be based on a total of 1000 points. Categories listed below are approximate, but should closely resemble the final distribution.

1. Exams:
Total of 450 points; Exam 1 = 150 points, Exam 2 = 150 points, Exam 3 = 150 points

2. Final Exam:
Total of 150 points.

3. Pre-lecture questions
Total of 100 points (21 x 6 points, earn a maximum of 100 points)

4. Homework
Total of 300 points; 11 homework worth 30 points each (drop lowest score)

Total Points for MCB 450 = 1000 points

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

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 450 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>
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<td>0.667</td>
</tr>
<tr>
<td>F</td>
<td>549-0</td>
<td>0.000</td>
</tr>
</tbody>
</table>
## MCB 450 FA21 (Online)

### Tentative Course Calendar with Weekly Schedule of Topics and Readings

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Date</th>
<th>Topic</th>
<th>Lecturer</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tu, Aug 24</td>
<td>Water; Non-Covalent Intermolecular Interactions; H-bonds, Ionization of Weak Acids &amp; Bases; Titrations; pH</td>
<td>Chen</td>
<td>1, 2</td>
</tr>
<tr>
<td>2</td>
<td>Th, Aug 26</td>
<td>Protein composition and structure</td>
<td>Chen</td>
<td>3-4</td>
</tr>
<tr>
<td>3</td>
<td>Tu, Aug 31</td>
<td>Digestion, absorption &amp; metabolism</td>
<td>Chen</td>
<td>14-15</td>
</tr>
<tr>
<td>4</td>
<td>Th, Sept 2</td>
<td>Amino acid metabolism</td>
<td>Chen</td>
<td>30, 31</td>
</tr>
<tr>
<td>5</td>
<td>Tu, Sept 7</td>
<td>Nucleotide metabolism</td>
<td>Chen</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>Th, Sept 9</td>
<td>Oxidative Phosphorylation</td>
<td>Chen</td>
<td>20, 21</td>
</tr>
<tr>
<td>Review</td>
<td>Tu, Sept 14</td>
<td>Review for Exam 1</td>
<td>Chen</td>
<td></td>
</tr>
<tr>
<td><strong>Exam 1</strong></td>
<td>Th, Sept 16</td>
<td>Exam 1 (Online in LON CAPA from 7-9PM)</td>
<td>Chen</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Tu, Sept 21</td>
<td>DNA structure and replication</td>
<td>Chen</td>
<td>33-34</td>
</tr>
<tr>
<td>8</td>
<td>Th, Sept 23</td>
<td>DNA damage, Repair and Cancer</td>
<td>Chen</td>
<td>35</td>
</tr>
<tr>
<td>9</td>
<td>Tu, Sept 28</td>
<td>RNA structure and transcription</td>
<td>Chen</td>
<td>36</td>
</tr>
<tr>
<td>10</td>
<td>Th, Sept 30</td>
<td>Protein synthesis</td>
<td>Chen</td>
<td>39-40</td>
</tr>
<tr>
<td>11</td>
<td>Tu, Oct 5</td>
<td>Gene regulation</td>
<td>Chen</td>
<td>37-38</td>
</tr>
<tr>
<td>12</td>
<td>Th, Oct 7</td>
<td>Recombinant DNA technology and protein technology</td>
<td>Chen</td>
<td>5,41</td>
</tr>
<tr>
<td>Review</td>
<td>Tu, Oct 12</td>
<td>Review for Exam 2</td>
<td>Chen</td>
<td></td>
</tr>
<tr>
<td><strong>Exam 2</strong></td>
<td>Th, Oct 14</td>
<td>Exam 2 (Online in LON CAPA from 7-9PM)</td>
<td>Chen</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Tu, Oct 19</td>
<td>Enzyme kinetics and regulation</td>
<td>Fratti</td>
<td>6, 7</td>
</tr>
<tr>
<td>14</td>
<td>Th, Oct 21</td>
<td>Principles of Metabolism; ATP and high-energy compounds; electron carriers</td>
<td>Fratti</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>Tu, Oct 26</td>
<td>Membranes, cell signaling, and regulation of fuel metabolism</td>
<td>Fratti</td>
<td>12, 13</td>
</tr>
<tr>
<td>16</td>
<td>Th, Oct 28</td>
<td>Glycolysis</td>
<td>Fratti</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>Tu, Nov 2</td>
<td>Pentose Phosphate Pathway</td>
<td>Fratti</td>
<td>26</td>
</tr>
<tr>
<td>18</td>
<td>Th, Nov 4</td>
<td>Glycogen synthesis and degradation</td>
<td>Fratti</td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Tu, Nov 9</td>
<td>Review for Exam 3</td>
<td>Fratti</td>
<td></td>
</tr>
<tr>
<td><strong>Exam 3</strong></td>
<td>Th, Nov 11</td>
<td>Exam 3 (Online in LON CAPA from 7-9PM)</td>
<td>Fratti</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Tu, Nov 16</td>
<td>Gluconeogenesis</td>
<td>Fratti</td>
<td>17</td>
</tr>
<tr>
<td>20</td>
<td>Th, Nov 18</td>
<td>The Pyruvate Dehydrogenase Complex and the Krebs cycle</td>
<td>Fratti</td>
<td>18, 19</td>
</tr>
<tr>
<td>21</td>
<td>Tu, Nov 30</td>
<td>Cholesterol and steroid metabolism</td>
<td>Fratti</td>
<td>18</td>
</tr>
<tr>
<td>22</td>
<td>Th, Dec 2</td>
<td>Fatty acid synthesis; β-oxidation; ketone bodies</td>
<td>Fratti</td>
<td>27, 28</td>
</tr>
<tr>
<td>23</td>
<td>Tu, Dec 7</td>
<td>Ethanol metabolism</td>
<td>Fratti</td>
<td>Lecture notes</td>
</tr>
<tr>
<td>Th, Dec 9</td>
<td>Reading Day- No Class</td>
<td></td>
<td>Fratti</td>
<td></td>
</tr>
<tr>
<td><strong>Wed, Dec 15</strong></td>
<td>FINAL EXAM (8AM to 10AM)</td>
<td></td>
<td>Fratti</td>
<td></td>
</tr>
</tbody>
</table>
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 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:
  - The course rubric in the subject line
  - 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 course that you are concerned about (the course personnel often work with multiple courses)
  - Your section letter/number
  - 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)
- 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:
  - 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/
  - 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.
  - 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.
  - 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 you 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://oiir.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  
  - Discrimination & Harassment Prevention  
  - Title IX  
  - Accessibility & Accommodations  
  - Inclusive Illinois