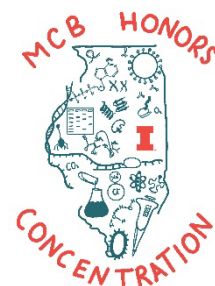




School of Molecular & Cellular Biology

MCB 298A, SPRING 2024

Honors Lab Discussion, 1 Credit Hour



INSTRUCTOR: Dr. Shawna Naidu
209 Burrill Hall
shawna@illinois.edu

CLASS MEETINGS: 6 Burrill Hall
Mondays 10-10:50 AM
Office Hours by appointment

Course Overview and Description:

As a science major, there are certain encompassing competencies that you should have by the time you graduate. Students should be able to:

1. Know and apply the basic knowledge in their field of study
2. Effectively communicate this knowledge both orally and in writing
3. Exhibit strong critical thinking and problem-solving skills
4. Apply knowledge and critical thinking skills to new information and problems

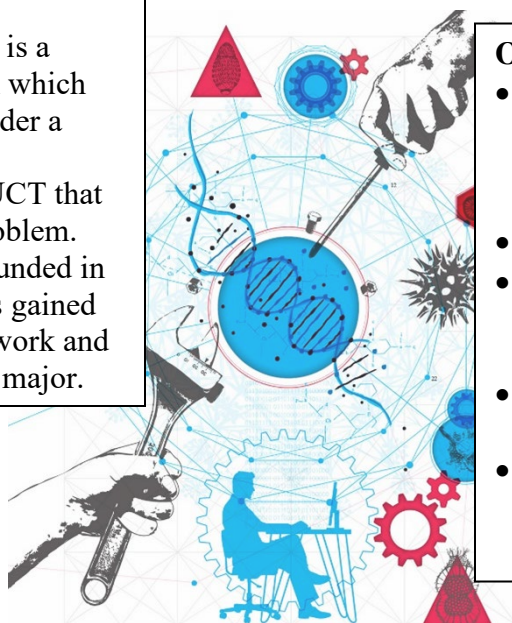
MCB 298 A&B aim to help students develop some of these skills. Such skills are useful to students planning to continue to graduate school and are highly transferrable to other career paths as well.



Communication, critical thinking, problem solving, analytical skills and teamwork, appear frequently on lists of top skills sought by employers in a multitude of fields.

DESCRIPTION:

The focus of this course is a semester-long project in which student teams will consider a real-world problem and conceptualize a **PRODUCT** that could help solve this problem. Solutions should be grounded in the knowledge and tools gained throughout their coursework and experiences as an MCB major.



OBJECTIVES: Students will...

- Develop an appreciation for the application of molecular biology and cellular biology to real-world problem-solving and product-development.
- Increase critical thinking skills.
- Improve oral presentation skills through participation and observation and evaluation of professionals and peers.
- Improve teamwork skills through participation, reflection, and peer evaluation.
- Develop greater appreciation for and skill in the incorporation of creativity in the field of scientific inquiry.

"I'm not very creative' doesn't work. There's no such thing as creative people and non-creative people. There are only people who use their creativity and people who don't. ...The only unique contribution that we will ever make in this world will be born of our creativity."

--Brené Brown, PhD LMSW

Course Prerequisites: None

Course Text/Materials Information: No text. Idea Journal required (see below)

Course Tools: Learning Management System (LMS) is Canvas

Grading Information and Breakdown:

You receive one hour of graded Honors credit for the Honors Lab Discussion (MCB 298). While most students receive a high grade in this class, it is not an “easy A”—a high level of performance is expected from all Honors students. Grades will be based upon assignments and presentations as follows:

	Total Number	Points for each	Total Points	Weighted Percentage of final grade
Attendance	12			15
Reflections	5	10	50	20
Individual Idea Document	1	25	25	20
3 Ideas Proposal/Peer Reviewed	1	63/21	84	20
Final Presentation	1	30	30	20
Miscellaneous*	3	2	6	5
Total				100%

* The **Team Contract** and CATME Surveys are graded on a complete/incomplete scale. 0=did not complete, 1=partially completed or late, 2=fully completed on time.

Grade cut-offs will not be higher than indicated in the following chart:

Letter Grade	Lowest %	Letter Grade	Lowest %
A+	97	B+	87
A	93	B	83
A-	90	B-	80

Other Information:

FORMAT and ATTENDANCE:

Students will spend most of the time in class interacting with their teammates, exchanging ideas, and gathering feedback from their peers. Some team meetings outside of class may be necessary.

In order to facilitate in-class research/discussion, I ask that those of you who are able, please bring your wireless capable lap-tops or tablets to class. MCB 298 A meets once per week with two “catch-up” weeks built into the semester (a total of 12 in person meetings). For the “catch-up” weeks, attendance is not required; rather, Teams will meet outside of class as needed. Attendance at each class meeting is critical for a complete honors experience; therefore, **attendance is worth 15% of your**

I have really enjoyed the process. It is kind of a relaxing and fun way to explore areas of MCB I never really considered. It pushes us to grow in ways different from the instruction provided in our other courses.

overall grade in the course. The LMS will assign you 75% of the daily attendance grade if you are more than 10 minutes late. Because we meet only 12 times during the semester, I will not be allowing any “drops” for missed classes; however, approved absences due to illness or other extreme circumstances will be considered excused.

ASSIGNMENTS:

Written Reflections:

Reflective writing helps students to develop critical thinking and promotes creativity. When you write reflectively about your experiences, you think more deeply about your learning and consider how to apply those concepts to wider issues. It also develops communication skills and self-awareness. There are five written reflection assignments that will be submitted through the course LMS. Past experience suggests that a minimum of 400-600 is needed to fully address the specific prompt assigned. Please see the LMS for more details on this assignment. **Reflection grades will be scaled to 20% of your final grade.**

Individual Ideas Document:

Early in the semester you will be asked to generate a minimum of three project ideas. Your individual ideas document will be turned in for grading and shared with your teammates for brainstorming. Please see the LMS for more details on this assignment. **This assignment will be scaled to 20% of your final grade.**

Three Ideas Proposal:

Your team will narrow down everyone’s individual ideas to the team’s “Top Three Ideas.” Your team will write a Three Ideas Proposal, which will be shared with the class for peer review. Please see the LMS for more details on this assignment. **This assignment will be scaled to 20% of your final grade.**

Final Presentation:

After reviewing Peer Feedback, your team will narrow your project down to your top idea, which will be shared with the class in an oral presentation at the end of the semester. Please see the LMS for more details on this assignment. **This assignment will be scaled to 20% of your final grade.**

I ... realize there is a place for creativity and exploration in the sciences. ... There are still so many problems left to tackle in the world and our major has well equipped us to create solutions.

CREATIVITY:

In all aspects of this course, **creativity is highly valued** and there will be a “creative component” assessed for grading in most of your assignments. Creativity can manifest in many ways and includes opening yourself to new ideas and thinking “outside the box.” Creativity in the area of artistic expression, including illustration, graphic design, use of color etc. is also encouraged in some of your documents (see individual assignments).

I think working on this project and this class has really encouraged my creativity, and I have found myself doing things like journaling and creating projects again ... I would like to use this experience as a model for group work in the future.

TEAMWORK:

MCB 298 A will focus substantially on building teamwork skills. There will be **two major team assignments: The Three Ideas Proposal and the Final Presentation. Each will be scaled to 20% of your final grade.** It is important that all members of the Team contribute equally to the work. This will be assessed via personal and peer evaluation of teamwork and may be a component of the student's final grade. The Three Ideas Proposal will be Peer Graded with 75% of the score determined by your peer's evaluation and 25% of your score determined by your evaluation of your peer's work.

This was by far my most favorite group collaboration ever and I thoroughly enjoyed brainstorming, discussing, and hanging out with these people

CATME Team Evaluation:

Teams will be evaluated using an external program (CATME: Comprehensive Assessment of Team Member Effectiveness). You will receive emails from CATME prompting you to complete the survey during a specific window of time. Points will be given for completing the survey. **The CATME system does not allow late submissions of surveys.**

LATE POLICY:

Assignments with due dates must be turned in on time; late assignments will not receive full credit. **The LMS system will automatically deduct 5% of the assignment grade per day late.** E-mail or internet problems are no excuse for late work so please do not wait until the last minute to submit assignments. No assignments will be accepted after that last day of classes for the semester.

OTHER POLICIES: See the end of this document.

Week	Date	In class activity	Work on...	Assignment Due	Due Date*
1	Jan 15	MLK Jr. DAY—NO CLASS			
2	Jan 22	Course Policies and Introduction	<ul style="list-style-type: none"> Start developing your project ideas (After reviewing on-line resources) Review on-line resources on Synthetic Biology and Bioengineering before next class 	Reflection #1: Synthetic Biology	Jan 29
3	Jan 29	The Value of Teamwork	<ul style="list-style-type: none"> Continue developing project ideas. Review on-line resources on Teamwork and Brainstorming (total time about 40-60 min) before next class 	CAT-ME Team-maker Survey	Feb 1 (Thurs. 11:59 PM)
4	Feb 5	Team Building, Team Contract	<ul style="list-style-type: none"> Finalize Individual Ideas Document Finish Team Contract Complete Social Activity (by week 6) 	Individual Ideas Document (upload AND Hardcopy)	Feb 12
5	Feb 12	Teamwork for Three Ideas	<ul style="list-style-type: none"> Develop top 3 ideas Complete Social Activity (by week 6) 	Reflection #2: Team First Impressions and Goals	Feb 19
6	Feb 19	Teamwork for Three Ideas	<ul style="list-style-type: none"> Develop top 3 ideas 		
7	Feb 26	Teamwork for Three Ideas	<ul style="list-style-type: none"> Develop top 3 ideas 		
8	Mar 4	Final polishing of Three Ideas	<ul style="list-style-type: none"> Finalize Three Ideas Proposal 	Three Ideas Proposal	Mar 18
	Mar 11	SPRING BREAK—NO CLASS			
9	Mar 18	NO CLASS 3 Ideas Proposal Due	<ul style="list-style-type: none"> Peer Evaluations 	Peer evaluations	Mar 24 (11:59 PM)
10	Mar 25	Review Peer Feedback	<ul style="list-style-type: none"> Work on top idea and final presentation 	Reflection #3: Peer Review process	Apr 1
11	Apr 1	Teamwork for Final Presentation	<ul style="list-style-type: none"> Work on top idea and final presentation 		
12	Apr 8	Teamwork for Final Presentation	<ul style="list-style-type: none"> Work on top idea and final presentation 	Reflection #4: Bioethics	Apr 15
13	Apr 15	NO CLASS Final polishing of presentation outside of class	<ul style="list-style-type: none"> Work on top idea and final presentation 		
14	Apr 22	Final Presentations		Reflection #5: Final team/project/self-evaluation CAT-ME Final Teamwork Survey	May 1 (11:59 PM)

*Due dates are always at the beginning of class (10 AM, Mondays), unless otherwise noted

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.

Exams:

- This class has no exams

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 Team/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

LGTB 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