

IB 533: Human Genome & Bioinformatics

Summer 2023; CRN 36457

Course Description

Highlights advances in understanding the human genome, utilizing the latest techniques in bioinformatics; i.e., acquiring, analyzing, storing, and displaying the information from the entire genome and protein sequences. Explores the latest laboratory techniques, as well as the use of extensive online databases and software. Students explore the significance of sequencing the human genome, applying bioinformatics to the genome, and realizing its potential to understand human health, disease, and the place of humans in the large ecosystem.

This course is 4 credit hours and does not have any prerequisites. This course is restricted to OMST or Integrative Biology graduate students in master's degree programs.

Student Learning Objectives

Upon completing this course, students will be able to:

- Be fluent in terms related to genomics, DNA sequencing and annotation, and bioinformatics sites;
- Explain the different technologies used to sequence DNA and proteins;
- Navigate common bioinformatics databases and find information within;
- Understand what information bioinformaticians and researchers are looking for once a sequence of DNA or protein is obtained;
- Compare multiple sequences and explain why this information is useful for researchers;
- Evaluate the methods used for studying your chosen disease/disorder;
- Apply the gained knowledge to explain the complicated science of genomics and how it relates to the chosen disease/disorder to members of the general public in a clear and engaging manner.

Course Structure

This is a **4-credit hour** course. The course is **8 weeks** long and consists of 8 content modules. Please be aware that this course is accelerated in nature; 16 weeks' worth of content will be covered in an 8-week time span. You should dedicate approximately **14-24 hours** per week (at least 6-8 hours per week learning the advanced topics of this course (through video lectures and readings), and at least 8-16 additional hours per week on homework assignments and class projects) to working on the course itself, but actual time commitments will vary depending on your input, needs, and personal study

habits. You are required to log on to the course website a minimum of **4 days per week** but as discussions develop, you will probably need to do so more frequently.

This course is designed with the principles of collaborative learning, constructivism, and active participation in mind. You are encouraged to share your thoughts and engage in problem-solving. The course has a consistent and predictable structure, organized around the weekly modules, with a course website that is straightforward and easy to navigate. Instructions and due dates for activities and assignments are clearly articulated so that you know what is expected of you and will be able to easily stay on track.

Your instructor realizes that you have a life beyond the scope of this course. However, if you are unable to complete an assignment because of professional obligations, you should notify the instructor or, better yet, prepare the assignment ahead of time and post it early. This will give your classmates a head start in reading and responding to your work. Most assignments are due by 11:55 PM of their respective due dates as listed on the course calendar, giving you and your classmates time to read and comment on each other's work before the next module begins.

Readings and responses to discussion questions should be read and submitted during the module for which they are assigned in order to get the most benefit from the discussions. At the end of each content module, participants will have an opportunity to make sure that they have completed all the required activities and assignments.

Instructor

- Joanne Manaster
- University of Illinois at Urbana-Champaign
- Contact Information:
 - Office Phone: +1 (217) 244-2489
 - E-mail: joannema@illinois.edu (best way to reach me)

Textbook

There is one book required for the course: [Genome: An Autobiography of a Species in 23 Chapters](#) by Matt Ridley. In addition, please refer to the optional books of interest, websites, and e-Reserve information listed below and in the overview of each weekly module.

Articles and e-Reserves

Other reading materials and e-reserves will be listed in the weekly Module Overview pages within the course website.

Course Outline

- **Week 1: Basic Molecular Biology Review, Introduction to Genomics and Bioinformatics, Introduction to Common Bioinformatics Databases** In this module, students will review and refresh their knowledge of the basic tenets of molecular biology and be introduced to the fields of genomics and bioinformatics. This will also be an introduction to the major bioinformatics databases. Students will take a tour of the sites and get a feel for navigating them.
 - Text Reading: : *Genome: An Autobiography of a Species in 23 Chapters* by Matt Ridley, Chapters 1, 2, 3.
- **Week 2: Genome Sequencing Techniques and Annotation** This week's module will be an overview of the tools and techniques commonly used to sequence genomes and will look at information most commonly looked for once a researcher has a sequence of DNA.
 - Text Reading: : *Genome: An Autobiography of a Species in 23 Chapters* by Matt Ridley, Chapters 4, 5, 6.
- **Week 3: The Human Genome** This module will allow students to explore the significance of genome sequencing and the vast potential of the information obtained by sequencing the human genome. The history of the human genome project is an important look at how science unfold through advances in technologies and interpersonal drama.
 - Text Reading: : *Genome: An Autobiography of a Species in 23 Chapters* by Matt Ridley, Chapters 7, 8, 9.
- **Week 4: Genomes of Model Organisms; Genomic Variation; Genomic Medicine** This week's module will consider the nature and distribution of variation of the genome within a species; students will be introduced to the role of Direct-to-Consumer sequencing services in personal genomics.
 - Text Reading: : *Genome: An Autobiography of a Species in 23 Chapters* by Matt Ridley, Chapters 10, 11, 12.
- **Week 5: Comparative Genomics in Evolution; The Microbiome** In Week 5, students will consider the nature and distribution of variation of the genome between species and will receive an introduction to analyzing multiple sequence alignments. Using multiple online bioinformatics tools, students will analyze sequence alignments and understand the theory behind best alignments and will be introduced to creating phylogenetic trees using bioinformatics databases. Information will be provided on the role of genomics in the discovery and elucidation of information about the microbiome.
 - Text Reading: : *Genome: An Autobiography of a Species in 23 Chapters* by Matt Ridley, Chapters 13, 14, 15.
- **Week 6: Gene Expression, the Transcriptome, and Epigenetics** In this module, students will be introduced to the importance of documenting gene expression on a genome-wide scale and the technologies developed for parallel analysis of the expression of thousands of genes.

- Text Reading: : Genome: An Autobiography of a Species in 23 Chapters by Matt Ridley, Chapters 16, 17, 18.
- **Week 7: Proteomics; Gene Editing with CRISPR/Cas9** Students will explore protein sequences, function, structure, and the acquisition of information related to proteins. Additionally, students will learn about the new powerful molecular tool CRISPR/Cas9 for gene editing.
 - Text Reading: : Genome: An Autobiography of a Species in 23 Chapters by Matt Ridley, Chapters 19, 20, 21.
- **Week 8: Final Project** This week, students will present or post their final project early in the week. Fellow students will be assigned a peer's project to evaluate before the end of the week. Students will earn points by evaluating the projects but the projects will be graded solely by the instructors.
 - Text Reading: Genome: An Autobiography of a Species in 23 Chapters by Matt Ridley, Chapters 22, 23.

Grading

You are expected to complete your work independently, in accordance with [University policy](#). Failure to do so will result in strict disciplinary action, including loss of all credit for the assignment, notification of a dean, and possible dismissal from the University. You may work with others on homework, but the final product must be your own.

Grading Scale Point Distributions

Grade	Points	Percent	Assignments	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Total points per assignment	Relative Weight	Real
A+	950-1000	95.00-100.00												
A	900-949	90.00-94.99	Orientation (quiz/intros)	10								10	1%	
B+	850-899	85.00-89.99	Bioinformatics Site Visit	15	15	15	15	15	15	15		105	13%	
B	800-849	80.00-84.99	Book Questions	10	10	10	10	10	10	10		70	8%	
C+	750-799	75.00-79.99	Discussion Post	15	15	15	15	15	15	15		105	21%	
C	700-749	70.00-74.99	Discussion Replies	10	10	10	10	10	10	10		70		
D+	650-699	65.00-69.99	Self-Assessment Quiz	10	10	10	10	10	10	10		70	8%	
D	500-649	50.00-64.99	Final Project Milestones	20	20	20	20	20	20	20		140	16%	
F	0-499	0.00-49.99	Final Project								200	200	33%	
			Peer Evaluation Final Project							80	80			
			Total points	90	80	80	80	80	80	80	280	850	100%	

View the Graduate College Handbook for Students, Faculty and Staff Chapter III: Academic Record [Grading System](#) page for more information.

Assignments, Weights, and Deliverables: You can access your scores by clicking the **Grades** link from the course home page. All interim and final deliverables have due dates. Failure to meet deadlines results in a reduction of the assignment points. For the due dates of each assignment, please see the course calendar.

Module Overview Each module will begin with the module overview, explain what the module is about, what learning goals you are expected to achieve, how long the module will take, and in what activities you will participate. Each module is designed with the same structure and activities unless otherwise specified. The module activities are explained in greater detail below. You can find the due dates of specific assignments in the course calendar.

Synchronous Sessions Each week there will be a synchronous session in which all students will come together online at the same time to talk. These sessions will use *Zoom* to bring all participants together in a session where you can text chat, voice chat, and see the computer desktop of the instructor. While you are encouraged to attend every session, there is no credit since it is optional. However, students usually find the sessions valuable.

Bioinformatics Site Visits (13%) Weekly: Students will follow guided instructions to visit multiple sites nearly weekly in order to familiarize themselves with common bioinformatics databases and explore what tools are available to researchers and the general public to assist in the analysis of DNA and protein sequences.

Discussion (21%) Each week, you will answer given discussion questions and reply to the answers of two other classmates.

Guided Book Questions (8%) Weekly: Students will have the opportunity to learn more about their chosen genomic disease/disorder by finding answers to questions based on the book chapters they are reading in *Genome: An Autobiography of a Species in 23 Chapters*.

Milestone for Final Project (16%) Weekly: This course will guide you step by step toward the completion of your final project. Each week you will have milestones and book questions to complete related to the information learned during the week. Any information you provide must be backed up by a primary literature source (or sources) and you will cite these in the format suggested by [Nature](#). All of these milestones will work together to help finish your final project for this class.

Self-Assessment Quiz (8%) Weekly: At the end of each module, students will take a self-paced 10-question quiz to evaluate new knowledge obtained. This will be a mixture of multiple choice, true/false, matching, and short answer questions.

Final Project (33%) One time: By the end of this course, you will become an expert on one disease/disorder that has been genomically elucidated. You may begin with a disease that has a long genetic history, but it must be one that has been further studied using the new techniques involved in genomics. Your final project will be describing the disease to the

general public (think your mom or cousin, for instance). You will have a lot of flexibility in HOW you present the disease for the final project. You may want to write a book chapter, a newspaper or magazine article, start a blog, or make a video or a podcast, or even write a comic book. Your classmates will provide peer feedback. You will have to present your information in person to the instructor so this can qualify for the LAS sanction 20% ID verifiable assignment.

A note about sources of information:

It is highly recommended that you primarily consult the following sources of information in studying for this class. Use Google-discovered sites with caution and a skeptical eye, as you probably are aware.

- Suggested books and required readings
- Supplemental information posted on course website
- Internet links provided in class or on course website

Schedule for Summer 2023

Week	Topic	Major Assignments Due
1 (Jun 12)	Week 1: Basic Molecular Biology Review, Introduction to Genomics and Bioinformatics, Introduction to Common Bioinformatics Databases	<ul style="list-style-type: none"> • Orientation Activities • Week 1 Lessons and Readings • W1 Synchronous Session (Tu 7pm Central) • W1 Discussion (post, replies) • W1 Self-Assessment • W1 Bioinformatics Exercise • W1 Guided Book Questions • W1 Final Project Milestone
2 (Jun 19)	Week 2: Genome Sequencing Techniques and Annotation	<ul style="list-style-type: none"> • Week 2 Lessons and Readings • W2 Synchronous Session (Tu 7pm Central) • W2 Discussion (post, replies) • W2 Self-Assessment • W2 Bioinformatics Exercise • W2 Guided Book Questions • W2 Final Project Milestone
3 (Jun 26)	Week 3: The Human Genome	<ul style="list-style-type: none"> • Week 3 Lessons and Readings • W3 Synchronous Session (Tu 7pm Central) • W3 Discussion (post, replies) • W3 Self-Assessment • W3 Bioinformatics Exercise • W3 Guided Book Questions • W3 Final Project Milestone

4 (Jul 3)	Week 4: Genomes of Model Organisms; Genomic Variation; Genomic Medicine	<ul style="list-style-type: none"> • Week 4 Lessons and Readings • W4 Synchronous Session (Tu 7pm Central) • W4 Discussion (post, replies) • W4 Self-Assessment • W4 Bioinformatics Exercise • W4 Guided Book Questions • W4 Final Project Milestone
5 (Jul 10)	Week 5: Comparative Genomics in Evolution; The Microbiome	<ul style="list-style-type: none"> • Week 5 Lessons and Readings • W5 Synchronous Session (Tu 7pm Central) • W5 Discussion (post, replies) • W5 Self-Assessment • W5 Bioinformatics Exercise • W5 Guided Book Questions • W5 Final Project Milestone
6 (Jul 17)	Week 6: Gene Expression, the Transcriptome, and Epigenetics	<ul style="list-style-type: none"> • Week 6 Lessons and Readings • W6 Synchronous Session (Tu 7pm Central) • W6 Discussion (post, replies) • W6 Self-Assessment • W6 Bioinformatics Exercise • W6 Guided Book Questions • W6 Final Project Milestone
7 (Jul 24)	Week 7: Proteomics; Gene Editing with CRISPR/Cas9	<ul style="list-style-type: none"> • Week 7 Lessons and Readings • W7 Synchronous Session (Tu 7pm Central) • W7 Discussion (post, replies) • W7 Self-Assessment • W7 Bioinformatics Exercise • W7 Guided Book Questions • W7 Final Project Milestone
8 (Jul 31)	Week 8: Final Project	<ul style="list-style-type: none"> • Week 8 Lessons and Readings • W8 Synchronous Session (Tu 7pm Central) • Final Project Upload • Final Project Peer Review

Technical Support

Students who experience technical difficulties should get help from the following resources:

- For course content, activities, grades, etc., consider posting your question to the General Q & A Forum; otherwise, contact your instructor.
- [Course website problems](#)
- [Other technical problems](#)

Academic Calendar

Course Length: This University of Illinois course is 8 weeks long. Definition of a Course Week: A course week is defined as the period between Sunday, 12:00 AM Central Time, and Saturday, 11:59 PM Central Time. For more information, see the [University's Academic Calendar](#).

Participation

Student Commitment: By registering for this online course, you commit to self-motivated study, participation in online course activities, and timely submission of all assignments. Furthermore, you commit to accessing the course website and checking e-mail at least 4 days per week, as well as to devoting at least 14-24 hours weekly to preparing for each module and completing the required assignments and readings.

Assignments

Late Submissions of Assignments and Other Written Work: Assignments, case studies, reflective essays, and other written work are due by 11:55 PM Central Time on the dates specified in the course calendar, unless otherwise noted. Unless permission from the instructor is obtained at least 1 day before a due date, projects later than 24 hours past the due date will not receive a grade.

Late Submissions of Discussions, Wikis, and Blog Posts

The required initial discussion and wiki posts **must be made on time**. Assignments submitted within 24 hours will receive a penalty of 20%. Beyond 24 hours, the grade will be zero unless other arrangements have been made.

Being Excused from Assignments

If you wish to be excused from participation in class discussions or from submitting projects on time because of medical reasons or personal emergencies, you must address the issue with the course instructor. Because of this course's fast pace and the potential effect that such excusals may have on your ability to complete it successfully, such accommodation will be made on a case-by-case basis.

Instructor Responses

Instructor Feedback Turnaround Time: Questions posted to the General Q & A Forum usually will be answered within 24 hours. If possible, students are encouraged to answer questions posted by other students to the General Q & A Forum, rather than waiting for an instructor's response. Assignments submitted online will be reviewed and graded by the course instructor within 3 business days. Exams, essays, and term papers will be graded within 5 business days.

Responding to E-mails and Phone Calls: The instructor will respond to e-mail messages and phone calls within 24 hours of receiving them unless the instructor notifies you ahead of time of an inability to do so. When sending e-mail, include a subject line that identifies the course number and nature of your question. The instructor may not respond to questions sent to him or her that should be posted in the General Q & A Forum. Please don't be offended if you are asked to forward your question to this location. If you leave a voice mail message with the instructor, please check your e-mail for a response.

Communications

Daily Contact: Your daily contact should be via the General Q & A forums in our Learning Management System (Moodle) and via e-mail.

Course Questions: Questions pertaining to the course should be posted in our General Q & A Forum discussion forum. You can get to this forum from the course home page. Posting questions here allows everyone to benefit from the answers. If you have a question, someone else is probably wondering the same thing. Anyone submitting a general question via e-mail may be directed to resubmit the question to the General Q & A Forum. Also, participants should not hesitate to answer questions posed by peers if they know the answers and the instructor has not yet responded. This not only expedites the process, but also encourages peer interaction and support.

Personal Questions: Questions of a personal nature should first be sent to the instructor's e-mail address. When sending e-mail, include a subject that identifies the course number and nature of your question.

Emergencies: If you have an emergency that will keep you from participating in the course, please notify your instructor by using the instructor's e-mail address (listed on the Instructor Information page). Provide callback information in your e-mail (if necessary). You should also notify your program director of any emergencies.

Zoom

Zoom is a tool that allows multiple people to come together simultaneously via a computer to text chat, audio chat, video chat, collaborate on a digital whiteboard, and even share your computer's desktop with one another. The Instructor's Virtual Office and the Student Lounge (when available) make use of *Zoom*.

Instructor's Virtual Offices: Another way to communicate with the instructor is to make use of the virtual office hours. The instructor will be available by appointment in the **Virtual Office** for office hours, via *Zoom*.

Student Lounge: Participants may also want an alternative way to meet synchronously with each other for studying together, group projects, problem solving, and so on. Students may enter the **Student Lounge** virtual *Zoom* classroom. See the **Student Lounge** page at the left for more information and a link to the Student Lounge.

Announcements

The **Course Announcements** forum serves as a way for your instructor and University of Illinois administrators to make announcements within our virtual learning environment. Announcements posted here will also be sent to your Illinois e-mail address, so be sure to check your e-mail or the **Course Announcements** forum at least once a day to see whether any new announcements have been made.

E-mail

Course participants can also use the internal e-mail tool inside Moodle to communicate privately with the instructor, group members, and each other. Make sure your e-mail address is current and activated within your Moodle Profile so that messages sent to you from within Moodle are automatically forwarded to your regular e-mail address as well. You may find this [video tutorial on updating your Moodle profile](#) helpful in setting this up.

Telephone

The telephone is still sometimes the most effective mode for troubleshooting problems related to the course. The instructor's phone number, virtual office hour times, and other contact information can be found by clicking on the **Instructor Information** page within this Syllabus.

Academic Integrity

Academic dishonesty will not be tolerated. Examples of academic dishonesty include the following:

- Cheating
- Fabrication
- Facilitating infractions of academic integrity
- Plagiarism
- Bribes, favors, and threats
- Academic interference
- Examination by proxy
- Grade tampering.

Non-original work: Should an incident arise in which a student is thought to have violated academic integrity, the student will be processed under the disciplinary policy set forth in the Illinois Academic Integrity Policy, using the FAIR system (<https://studentcode.illinois.edu/article1/part4/1-401/>). If you do not understand relevant definitions of academic infractions, contact your instructors for an explanation within the first week of class.

Copyright

Student Content: Participants in University of Illinois courses retain copyright of all assignments and posts they complete; however, all materials may be used for educational purposes within the given course. In group projects, only the portion of the work completed by a particular individual is copyrighted by that individual. The University of Illinois may request that students' materials be shared with future courses, but such sharing will only be done with the students' consent. The information that students submit during a course may, however, be used for the purposes of administrative data collection and research. No personal information is retained without the students' consent.

Non-Student Content: Everything on this site and within University of Illinois courses is copyrighted. The copyrights of all non-student work are owned by the University of Illinois Board of Trustees, except in approved cases where the original creator retains copyright of the material. Copyrights to external links are owned by or are the responsibility of those external sites. Students are free to view and print material from this site so long as

- the material is used for informational purposes only;

- the material is used for noncommercial purposes only; and
- copies of any material include the respective copyright notice.

These materials may not be mirrored or reproduced on non–University of Illinois websites without the express written permission of the University of Illinois Board of Trustees. To request permission, please contact the academic unit for the program.

Student Behavior

Student Conduct: Students are expected to behave in accordance with the penal and civil statutes of all applicable local, state, and federal governments, with the rules and regulations of the Board of Regents, and with university regulations and administrative rules. For more information about the student code and handbook, see academic integrity policy and procedure (<https://studentcode.illinois.edu/article1/part4/1-402/>).

Netiquette: In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. The following are tips for interacting online via e-mail or discussion board messages, adapted from guidelines originally compiled by Chuq Von Rospach and Gene Spafford (1995):

- Remember that the person receiving your message is someone like you, deserving and appreciating courtesy and respect.
- Be brief; succinct, thoughtful messages have the greatest effect.
- Your messages reflect on you personally; take time to make sure that you are proud of their form and content.
- Use descriptive subject headings in your e-mails.
- Think about your audience and the relevance of your messages.
- Be careful when you use humor and sarcasm; absent the voice inflections and body language that aid face-to-face communication, Internet messages are easy to misinterpret.
- When making follow-up comments, summarize the parts of the message to which you are responding.
- Avoid repeating what has already been said; needless repetition is ineffective communication.
- Cite appropriate references whenever using someone else’s ideas, thoughts, or words.

Other Concerns

Disabilities and Religious Observances: Please contact your instructors or TAs during the first week of classes to make requests for disability accommodations or observation of religious holidays. To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-4603, e-mail disability@illinois.edu or go to the DRES website. If you are concerned you have a disability-related condition that is impacting your academic progress, there are academic screening appointments available on campus that can help diagnosis a previously undiagnosed disability by visiting the DRES website and selecting “Sign-Up for an Academic Screening” at the bottom of the page. To obtain waivers for student athlete (cheerleader, marching band, etc.) activities, submit your documentation to your instructor.

Diversity, Equity, and Inclusion (DEI): In forming an inclusive course, we mean a course that values and creates space for all identities such as those based on ethnicity, culture, sexual identity, gender identity, religious identity and beyond. Research shows that inclusive courses allow for better learning outcomes, a more positive learning experience, better community, and better leadership training in engaging humanity. To create an inclusive space in this course, we must all work to collaboratively create a safe and respected space that supports and encourages everyone to share their views and concerns. We must value multiple perspectives and experiences, while also reducing student experiences of marginalization. We must treat each other as individuals.

Family Educational Rights and Privacy Act (FERPA) Statement: Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <https://registrar.illinois.edu/academic-records/ferpa/> for more information on FERPA.

Sexual Misconduct Policy and Reporting Statement: The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <https://wecare.illinois.edu/resources/students/#confidential> Other information about resources and reporting is available here: wecare.illinois.edu.

Support: Basic needs insecurity is common among college students and the negative impacts are real:

- Increases difficulty in concentrating and studying, lowers retention, and decreases graduation rate.
- Generates and/or elevates depression, anxiety, insomnia, headaches, and burnout.
- Lowers morale and motivation, reduces creativity, hinders communication, decreases productivity, increase absenteeism, and decreases social opportunities.

Students who are hungry, burned-out, depressed, preoccupied with issues like money are less likely to succeed academically, socially, and personally. If at any point in the semester you are struggling with mental health issues (anxiety, depression, grief, PTSD, addiction, cultural struggles, coming out, etc.), inconsistent access to nutritious foods, housing or financial instability, or lack of access to any other basic needs, your instructor encourages you to seek help through one of the campus resources. Seeking support is healthy and courageous.

Mental Health: Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Student Health Fee (see <https://wellness.illinois.edu>). If you or someone you know experiences any of the above mental

health concerns, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do for yourself and for those who care about you.

- Counseling Center (217) 333-3704
- McKinley Health Center (217) 333-2700
- National Suicide Prevention Lifeline (800) 273-8255
- Rosecrance Crisis Line (217) 359-4141 (available 24/7, 365 days a year)
- If you are in immediate danger, call 911.

Community of Care: As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether regarding their well-being or yours, your instructor encourages you to refer this behavior to the Student Assistance Center 217-333-0050 or <http://odos.illinois.edu/community-of-care/referral/>). Based on your report, the staff in the Student Assistance Center reaches out to students to make sure they have the support they need to be healthy and safe.

Further, your instructor understands the impact that struggles with mental health can have on your experience at Illinois. Significant stress, strained relationships, anxiety, excessive worry, alcohol/drug problems, a loss of motivation, or problems with eating and/or sleeping can all interfere with optimal academic performance. Your instructor encourages all students to reach out to talk with someone, and wants to make sure students are aware that they can access mental health support at McKinley Health Center (<https://mckinley.illinois.edu/>). Or the Counseling Center (<https://counselingcenter.illinois.edu/>). For urgent matters during business hours, no appointment is needed to contact the Counseling Center. For mental health emergencies, you can call 911.

Food Assistance and Wellbeing Program: Among college students, 35-51% report experiencing food insecurity. At UIUC around 1 in 5 students experience food insecurity. Proper nutrition has been linked to positive brain function and better academic outcomes; don't settle for the "right of passage" of living on cheap, processed food. There are several community and campus resources to get you the nutrition you need to succeed. You can find them here: <https://odos.illino>