

# Eng. 177 – Spatial Visualization

## Fall Semester 2023

### Course Structure:

Discussion once per week.  
Tuesdays 5:00 – 5:50 pm

### Location:

1306 Everitt Laboratory

### Credit:

1 hour

### Course Objectives:

Throughout this course, students will be able to:

- Improve spatial visualization skills through online exercises and in-class activities
- Develop an appreciation for spatial visualization skills by considering uses beyond engineering graphics
- Advance communications skills through peer teaching and evaluations

### Instructor:

Brian S. Woodard, Ph.D.  
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Office Telephone: (217) 300 – 8109

### Teaching Assistant:

Izzy Mata  
E-mail: [immata2@illinois.edu](mailto:immata2@illinois.edu)

### Course Assistants:

Sumayyah Hussain, Jagriti Jain, Emma Fries, Xichen Li

### Office Hours:

TBD

### Course Website: <https://canvas.illinois.edu/courses/40179>

The Canvas website for this course will be used extensively for listing important course announcements, posting class presentations, submitting writing assignments, and viewing grades.

### Visualization Training Platform Website: <https://spatialvis.web.illinois.edu/>

A new module on this spatial visualization training platform will open each week and be due one week later.

### Assignment Policies:

 Assignments will be posted with deadlines on the course Canvas website.

Generally, late assignments are not accepted without approval from the course instructor in advance of the deadline for legitimate reasons.

### Class Materials:

No required textbook.

<b>Grading:</b>	Attendance and In-Class Exercises	10%
	Reflections (writing assignments)	10%
	Online training platform exercises	75%
	Completion of post-course assessment	5%

Grades will be assigned using the standard letter grade definitions with +/-.

**Absence Policy:**

Your attendance at all scheduled classes is mandatory and essential for your success in the course. However, circumstances occasionally occur where you need to miss a class.

**Planned Absences:** If you need to miss class for a religious observance or another legitimate reason, you must make arrangements to make up the missed work at least one week before the absence occurs. Otherwise, the absence will be considered unexcused.

**Illness / Family Emergency:** Do not attend class if you are sick. We must all work together to avoid spreading COVID-19 (or any other illness) in our community.

If you are ill or experiencing a family emergency and are unable to attend class or complete an assignment by the deadline, e-mail the instructor as soon as possible. Arrangements will be made to make up the in-class exercise or extend the homework deadline.

**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. 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.

**Anti-Racism and Inclusivity Statement:**

This course is committed to the creation of an anti-racist, inclusive community that welcomes diversity along a number of dimensions, including, but not limited to, race, ethnicity and national origins, gender and gender identity, sexuality, disability status, class, age, or religious beliefs. This course recognizes that Black, Hispanic, and Indigenous voices and contributions have largely either been excluded from, or not recognized in, science and engineering, and that both overt racism and micro-aggressions threaten the well-being of our students and our university community.

The effectiveness of this course is dependent upon each of us to create a safe and encouraging learning environment that allows for the open exchange of ideas while also ensuring equitable opportunities and respect for all of us. Everyone is expected to help establish and maintain an environment where students, staff, and faculty can contribute without fear of personal ridicule, or intolerant or offensive language. If you witness or experience racism, discrimination, micro-aggressions, or other offensive behavior, you are encouraged to bring this to the attention of the course director if you feel comfortable. You can also report these behaviors to Campus Belonging Resources (<https://diversity.illinois.edu/diversity-campus-culture/belonging-resources/>). Based on your report, Members of the Office of the Vice Chancellor for Diversity, Equity & Inclusion staff will follow up and reach out to students to make sure they have the support they need to be healthy and safe. If the reported behavior also violates university policy, staff in the Office for Student Conflict Resolution may respond as well and will take appropriate action.

**Academic Integrity:**

Violations of academic integrity are unacceptable.

In this course you are expected to produce your own work in all assignments.

Written assignments will be submitted through SafeAssign, a software tool that compares your writing against a large database as well as to the work of your current classmates and previously submitted assignments. Assignments with close matches to other work will be flagged and investigated.

The University of Illinois at Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: <http://studentcode.illinois.edu/>.

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: <https://studentcode.illinois.edu/article1/part4/1-401/>.

Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

**Disability-Related Accommodations:**

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the as soon as possible. To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class should contact Disability Resources and Educational Services (DRES) and see the instructor as soon as possible. If you need accommodations for any sort of disability, please speak to me after class, or make an appointment to see me or see me during my office hours. DRES provides students with academic accommodations, access, and support services. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TDD), or e-mail [disability@illinois.edu](mailto:disability@illinois.edu). <http://www.disability.illinois.edu/>.

**Sexual Misconduct Reporting Obligation:**

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>

**Emergency Response Recommendations:**

Emergency response recommendations can be found at the following website:

<http://police.illinois.edu/emergency-preparedness/>.

For more information, review this website and the campus building floor plans.

<http://police.illinois.edu/emergency-preparedness/building-emergency-action-plans/>.