

## Syllabus

**Course description:** The course gives an introduction into spacial Euclidean geometry and analytical geometry.

To develop our spacial thinking, we start with study of lines and planes in 3-dimensional space, and polyhedra and their cross sections. We continue with vectors and vector approach to solving geometrical problems. Further, we will give analytical description of lines and planes in Euclidean space. We will discuss conic sections and surfaces of degree two in 3-dimensional space. Non-Cartesian coordinate systems (polar, cylindrical, spherical) will be introduced. We will study area of plane figures and volumes of 3-dimensional solids.

**Instructor:** Julia Viro

e-mail: [julia.viro@stonybrook.edu](mailto:julia.viro@stonybrook.edu)

MLC and office hours: Tuesday and Thursday at 10am-11:30am or by appointment.

Julia Viro Zoom personal meeting room:

<https://stonybrook.zoom.us/j/9792031214>

**Brightspace.** All course information (besides homework) will be posted to Brightspace. Check Announcements and Content regularly!

**Textbook (optional):** Kiselev's Geometry Book II. Stereometry.

**Meetings:** Th 5:30pm-8:00pm in Physics 127 or over Zoom.

**Homework:** will be assigned weekly or biweekly through Brightspace. Please write legibly and explain your reasoning clearly and fully.

**Grading system:** your grade for the course will be based on: homework 30%, midterm 30 %, and final exam 40%.

**Technical requirements:** For some of our meetings, you need to have a microphone, web camera and stable internet connection. It would be great if you will use an iPad (or anything similar) to write/draw on and share the screen.

**Make-up policy:** Make-up examinations are given only for work missed due to unforeseen circumstances beyond the student's control.

**Student Accessibility Support Center (SASC) statement:** If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact SASC (631) 632-6748 or <http://studentaffairs.stonybrook.edu/dss/>. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and SASC. For

procedures and information go to the following website:  
<http://www.stonybrook.edu/ehs/fire/disabilities/asp>.

**Academic integrity statement:** Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instance of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary>

The following will be considered as acts of **academic dishonesty**:

- Using problems solving websites or other internet resources to get solutions.
- Getting help in any form from other people on the exams (tests).
- Sharing solutions and/or answers with other people.

All cases of violation of academic integrity will be reported immediately to the Academic Judiciary. Students who admitted dishonesty will face

- failure of the course,
- a dishonesty report in the transcript, and
- an obligation to take the Q course.

**Critical incident management:** Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, and/or inhibits students' ability to learn.

**Student Absences Statement:** Students are expected to attend every class, report for examinations and submit major graded coursework as scheduled. If a student is unable to attend lecture(s), report for any exams or complete major graded coursework as scheduled due to extenuating circumstances, the student must contact the instructor as soon as possible. Students may be requested to provide documentation to support their absence and/or may be referred to the Student Support Team for assistance. Students will be provided reasonable accommodations for missed exams, assignments or projects due to significant illness, tragedy or other personal emergencies. In the instance of missed lectures or recitations, the student is responsible for review posted slides, recorded lectures, and notes. Please note, all students must follow Stony Brook, local, state and Centers for Disease Control and Prevention (CDC) guidelines to reduce the risk of transmission of COVID. For questions or more information click here:

<https://www.stonybrook.edu/commcms/comingback/students.php>