

## 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@math.sunysb.edu](mailto:julia@math.sunysb.edu)

**Grader:** Ilya Elson. E-mail: [ielson@math.sunysb.edu](mailto:ielson@math.sunysb.edu)

**Textbook:** Kiselev's Geometry Book II. Stereometry.

**Meetings:** TuTh 5:30pm-6:50pm in Physics P123.

**Homework:** will be assigned weekly through the Blackboard and collected in class on Tuesdays. Please write legibly and explain your reasoning clearly and fully. You are encouraged to discuss the homework problems with others, but your write-up must be your own work. Suspiciously similar papers won't be graded. Late home work will not be accepted.

**Quizzes:** Short quizzes (5-10 min) will be given occasionally without prior notice.

**Grading system:** your grade for the course will be based on: homework 10%, quizzes 15% two midterms 20 % each, final exam 35%.

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

**Disability support services (DSS) statement:** If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services (631) 6326748 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 Disability Support Services. 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>

**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.