Dear students!
presentations should last 10–15 minutes

Topics for presentations

1. Steepest descent method.
2. Conjugate direction methods, conjugate gradient method.
3. Quasi-Newton methods.
4. Newton's method. Newton-Raphson method.
5. Calculating derivatives.
6. Large-scale unconstrained optimization.
7. Theory of constrained optimization.
8. Penalty methods.
9. Interior point (barrier) methods.
10. Linearization methods.
11. Gradient projection method.
12. Lagrange multipliers and the Karush-Kuhn-Tucker conditions.
13. Lagrange multiplier algorithms.
14. Duality and convex programming.
15. Least-Squares problems.
16. Linear programming: interior-point methods.
17. Quadratic programming.
18. Convex sets and functions. Subdifferential of convex function.
19. Duality and convex programming.