ITMO University

Basics of scientific presentation

Course Workload		Assessment form (examination/ graded test/ ungraded test)
ECTS	Hours	
3	108	Graded test

As part of this course, students will gain the experience of making a scientific presentation. This experience is important for a young scientist both to defend his diploma and to present his scientific results at scientific conferences. Students will gain experience in competently constructing a narrative, as well as conducting a scientific discussion.

Course structure:

1. Introduction to the course

1.1. Introduction to the course

2. Modern trends in nano-optics

2.1. 2D nanophotonics
2.2. Ultrafast nanophotonics
2.3. Hybrid nanophotonics
2.4. Material by design for nanophotonics
2.5. AI with nanophotonics
2.6. Data encryption with nanophotonics
2.7. Disease treatment with nanophotonics
2.8. Topological photonics
2.9. BICs
2.10. Optically resonant dielectric metamaterials
2.11. Photonic integrated circuits
2.12. Nonlinear photonics
2.13. Lab-on-Chip
2.14. Imaging Technologies
2.15. Biosensing
2.16. Nanolasers

3. Presentation of scientific results

3.1. Students' research topics