

COURSE CODE: COMET01

COURSE TITLE: Computational Methods for Physicists 1

DEPARTMENT: Physics

TEXTBOOK:

- Franklin, J., (Latest Edition). *Computational Methods for Physics*, Cambridge University Press.
- Giordano, N. and Nakanishi, H., (Latest Edition). *Computational Physics*, Prentice Hall
- Gould, H., Tobochnik, J. and Christian, W., (Latest Edition). *An introduction to computer simulation methods: applications to physical system*, Addison-Wesley
- Sirca, S. and Horvat, M., (Latest Edition). *Computational Methods for Physicists: Compendium for Students*, Springer
- Thijssen, J., (Latest Edition). *Computational Physics*, Cambridge University Press

READING LIST:

- Computational Methods for Nonlinear Systems.
<http://pages.physics.cornell.edu/~myers/teaching/ComputationalMethods/>
- Computational Physics Online Courses
http://www.phys.uconn.edu/~rozman/Courses/P2200_12F/courses.html
- Computational Physics : PHY411
<http://www-personal.umich.edu/~mejn/courses/2013/phys411/index.html>
- *MATLAB for Physics*
https://www.researchgate.net/publication/337944214_MATLAB_for_Physics_Manual

REQUISITE EQUIPMENT/MATERIALS FOR THE COURSE:

Computer with MATLAB software