

Module title: Special topics
Module Code: 22-14-925-01
Module Credit: 4
Term: Second term 1397-1398
Lecturer: Dr. M. Arab Ameri

arabameri@math.usb.ac.ir

Lecturing time: Saturday (7:30 – 9:30) and Monday (18 – 20)
Lecturing place: my room in faculty of mathematics
Assessments: 40% mid-term exam (1398/2/9)
60% final exam (1398/4/2)

Reference: papers in fractional differential equations

Module Subjects:

1th week: Introduction to fractional differential equations (ODE and PDE)

2th and 3th and 4th week: Spectral methods for numerical solution of fractional differential equations

5th and 6th and 7th week: Orthogonal polynomials for numerical solution of fractional differential equations

8th and 9th and 10th week: Conformable fractional derivative and study of its properties

11th and 12th and 13th week: Fractional ordinary differential equations with conformable derivative

14th and 15th and 16th week: Fractional partial differential equations with conformable derivative