

Course Title	New Therapeutic Approaches for Metabolic Disease
About this course	<p>Metabolic diseases are one of the most prevalent disorders and the major health hazards in the modern world. So, prevention and treatment of metabolic disease has crucial importance. Recently, new therapeutic approaches offer new clinical and scientific tools for diagnosis, prevention, and treatment of metabolic diseases.</p> <p>This course aims to introduce and clarify the new interdisciplinary therapeutic approaches emphasis on cell- based modeling and therapeutic technologies, bio-medical engineering, gene therapies, organism-based disease modeling and bio-discovery in metabolic disorders treatments. The course gives a good opportunity to describe and discuss the cell signaling pathways in disease focusing on metabolic disease. Moreover, this course provides a great chance to introduce cell-based models as a new therapeutic approaches of metabolic disease like diabetes mellitus.</p> <p>One of strengths of this course is its focus and introduce of interdisciplinary approaches like stem cells, genetics, and tissue engineering in management and therapies of metabolic diseases.</p>
Audience: Level (BSc, MSc., PhD, etc.)	This course primarily designed for Ph.D. candidates; M.D. and M.D/Ph.D. doctoral candidates.
Department Instructor	Royan Institute Center for Diabetes, Obesity and Metabolism Yaser Tahamtani
❖ Modules/Resources	The course includes preliminary modules on cellular and molecular biology and introduction to natural products that covers basic knowledge about this topic. In addition, the course includes advanced modules cover topics such as cell signaling pathways in disease development, tissue engineering, and advanced cellular biology.

Course Requirements	<p>Students must complete all introduced modules during the course. In addition, trainers should actively participate in cutting edge journal clubs, and workshops. Moreover, Students grades will be based on their scientific activities during the course, their presentation, and examination from the modules.</p>
Registration Costs	<p>2530 \$</p>
❖ Duration:	<p>One semester (6 months)</p>