Code	Course	Description
0905701	Advanced medicinal chemistry	Compulsory element Lectures: 3 credit hrs total: 3 credit hrs - provide the post graduate student the recent Knowledge about the sources, nature, uses, and important chemical, biochemical and pharmacological aspects of medicinal and pharmaceutical agents that treat or alleviate the disorder and regain the proper function different systems of the human body - encourage highlighting the importance of pharmaceutical chemistry research in drug industry in order to advance the well-being of the people of Egypt and the global community through generation of skilled scientists that integrate chemistry and biological sciences for improving drug discovery and enhancing human health. - Continuing professional development and education experiences to develop elite master graduates who display independent thought and acquire advanced knowledge and skills to apply pharmaceutical chemistry successfully within their disciplines. - Demonstrates research profiles (students, publications and degree programs) that are competitive with other MS degrees and focus on topics at the forefront of medicinal chemistry, to create a long standing reputation in excellence to rank among the top best faculties in Egypt and to serve as a stepping stone for students who want to pursue professional careers or continue in Ph. D. programs.
0905602	Advanced organic pharmaceutical chemistry	Compulsory element Lectures: 3 credit hrs total: 3 credit hrs - Generation and dissemination of high quality comprehensive knowledge grounded in the disciplinary divisions of Pharmaceutical Organic Chemistry. - Development of elite master graduates who display independent thought and acquire advanced knowledge and skills to apply Pharmaceutical Organic Chemistry successfully within their disciplines. - To provide students with relevant Organic Chemistry subjects that can be easily related to their current work and/or experience to their studies. - To encourage highlighting the importance of Pharmaceutical Organic Chemistry research in drug industry through generation of skilled scientists that integrate Organic Chemistry and Biological Sciences for

		improving drug discovery and enhancing human health.
0905604	Drug design	Compulsory element Lectures: 3 credit hrs practical: 2 credit hrs total: 5 credit hrs The course aims to provide the students with the necessary skills required for understanding the recent approaches in drug design,particularly: 1. Virtual Screening 2. High-Throughput Screening (HTC) 3. Structure-Based Drug Design 4. Ligand-Based Drug Design 5. Pharmacophore-Based Drug Design 6. Fragment-Based Drug Design 7. Quantitative Structure Activity Relationship (QSAR) 8. Computer-Aided Drug Design (CADD) 9. Drug-Likeness Optimization Measures 10. Drug Design: "Lead identification" 11. Drug Design: "Lead Optimization"
0905702	Drug Analysis	Elective element Lectures: 3 credit hrs total: 3 credit hrs - Generation and dissemination of high quality comprehensive knowledge grounded in the disciplinary divisions of Applied Pharmaceutical Analytical Chemistry. - To advance elite master graduates so as to display independent thinking and acquire highly developed knowledge and skills to apply Pharmaceutical Chemistry successfully within their disciplines. - To provide graduates with proficiencies in Applied Analytical Chemistry that are relevant to their research and/or industrial/community jobs, and enable them to enter the workforce or go on to further study. - To promote emphasizing the significance of Applied Analytical Pharmaceutical Chemistry research in drug industry and quality control/assurance through generation of multi-skilled graduates that integrates Pharmaceutical Chemistry and Biological Sciences to improve drug discovery and enhance global human health. - Engagement of students in the life of the University and unifying them by common values and mutual respect. - Striving to continually improve the effectiveness of Applied Analytical Chemistry activities, ensuring that the course is

		both responsive to academic needs and strategically focused.
		• To improve research performance so that the University moves to the top of the Egyptian higher education sector by building a critical mass of researchers who will develop a distinctive portfolio of high quality discovery, applied and commercial research. • *Delivering Successful Partnerships* which refers to a "connected community of teachers and learners. • Establishing a learning environment and culture which eases the transition to higher education and fosters student engagement and success, ethical behavior and overall satisfaction by creating a connected community of teachers and learners. • Implementing an effective teaching-research nexus to enrich the student experience through the direct involvement of researchers in both course development and delivery. • Embedding enhanced quality assurance and quality improvement processes, including regularly reviewing course quality, coherence and relevance and systematically seeking the views of students in a manner which is visible to and valued by them.
0905601	Drug synthesis	Elective element Lectures: 3 credit hrs total: 3 credit hrs Generation and dissemination of high quality comprehensive knowledge grounded in the disciplinary divisions of Pharmaceutical Organic Chemistry and Synthetic Medicinal Chemistry. • Develop elite master graduates who display independent thought and acquire advanced knowledge and skills to apply Pharmaceutical Organic Chemistry and Synthetic Medicinal chemistry successfully within their disciplines. • Provide students with relevant Organic Chemistry and Synthetic Chemistry subjects that can be easily related to their current work and/or experience to their studies. • Encourage highlighting the importance of Synthetic Medicinal Chemistry research in drug industry through generation of skilled scientists that integrate Synthetic Medicinal Chemistry and Biological Sciences for improving drug discovery and enhancing human health.