



Department of Physics

College of Education

University of Salahaddin

Subject: Programming (MATLAB)

Course Book: Year 2

Lecturer's name Diyar Ali Rasool

Academic Year: 2019/2020

Course Book

1. Course name	Programming (MATLAB)
2. Lecturer in charge	Diyar Ali Rasool
3. Department/ College	Physics/ Education
4. Contact	e-mail: Diyar.Rasool@su.edu.krd Diyarrasool@gmail.com
5. Time (in hours) per week	Theory: 2 hrs. Practical: 2x2 hrs. (10 hours/week)
6. Office hours	Monday from 8:30 Am to 1:30 Am.
7. Course code	
8. Teacher's academic profile	I did undergraduate degree at Department of Physics/ college of Education at Salahaddin University-Erbil between the years of 2006-2010. Since 2010 I got a position at Salahaddin University as a lab demonstrator. I stayed with the job for more than a year before moving to the United Kingdom in 2011 to study master's degree. In 2014, I obtained MSc in Advanced Science (Particle Physics) from the University of Liverpool, United Kingdom. In 2013, I returned to Salahaddin University and got a position as an assistant lecturer. I am a PhD student at the moment in Medical Physics.
9. Keywords	
10. Course overview:	The importance of programming is as a main tool that assist students to solve and understand different theoretical problems in their college lives and beyond. MATLAB gave large applications in different fields of physics and other sciences and capable to make newer programs for another problem. So, the MATLAB package used to teach programing as used in other universities.
11. Course objective:	This course is aimed to learn programing skills using MATLAB which is the most famous and applicable language in different fields of Scientific. It covers, in general, mathematical and physical implementation and appropriate for students work in scientific projects.
12. Student's obligation	In hall, the lecture illustrated through ordinary methods (ppt, white and black boards and MATLAB software), to prepare them for monthly examinations. In lab., the lectures repeated and illustrated through practical examples that applied by the lecturers and repeated by students on their Desktop computers and MATLAB software installed on laptop of students to try solving problems in their homes. Here prepare students to quiz and examinations that will done at every five weeks.
13. Forms of teaching	Lectures will be through using ppt slides that displays by data show, black and white boards.
14. Assessment scheme	Theories: final degree will form from:

<p>1. Three examination 2. Absence of students. Practice: final degree depends on: 1. Examine all four weeks. 2. weekly quiz 3. Absence 4. MATLAB Notebook.</p>	
<p>15. Student learning outcome: After successful completion of the courses, the students learns:</p> <ul style="list-style-type: none"> ➤ Knowledge of Programming (MATLAB). ➤ Understanding of main topics in MATLAB ➤ Obtaining general skills in programing that assist them to solving physics problems. ➤ Assist student to make curve and calculation (slope, intersection, formulas) of their report in different Labs. 	
<p>16. Course Reading List and References:</p> <ul style="list-style-type: none"> ➤ Basic of MATLAB and Beyond, By Andrew knight, CRC press, USA, 1st Edition, 2000. ➤ MATLAB Demystified, By David McMahan, McGraw-Hill Companies, USA, 1st Edition, 2007. ➤ Different Internet sources. 	
17. The Topics:	Lecturer's name
<p>Chapter One: MATLAB Basics Chapter Two: Interacting with MATLAB Chapter Three: Beyond the Basics Chapter Four: Simulink (may be according to available time) Chapter Five: GUIs (may be according to available time)</p>	<p>Diyar Ali Rasool (2 hr./weeks)</p>
18. Practical Topics (If there is any)	
<p>Same topics as in theories.</p>	<p>Diyar Ali Rasool (4 hr./weeks)</p>
<p>19. Examinations: 1. Compositional 2. True or false type of exams 3. Multiple choices</p>	
<p>20. Extra notes: There are too much unnecessary holidays that reduce topics give to students.</p>	
21. Peer review	پیداچونہوہی ہاودن