

# TEMPLATE FOR COURSE SPECIFICATION

## HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

### COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	University of Anbar
2. University Department/Centre	Information system
3. Course title/code	Advance mathematics
4. Programme(s) to which it contributes	classroom
5. Modes of Attendance offered	Attendance
6. Semester/Year	1st semester
7. Number of hours tuition (total)	45
8. Date of production/revision of this specification	
9. Aims of the Course	
1-To describe the aim of study advance mathematics	
2-To understand what difference between ordinary equation and differential equation	
3- To understand the difference between the type of differential equation	
4- To learn the type of method to solve the differential equation	
5- To apply the application of differential equation	

## 10· Learning Outcomes, Teaching ,Learning and Assessment Method

### A- Knowledge and Understanding

- A1. Understand the concept of ordinary and partial
- A2. Understand the method of solving the first order differential equation
- A3. Understand the method of solving second order differential equation
- A4. Understand the Laplace transform
- A5. Understand the Fourier series
- A6 .

### B. Subject-specific skills

- B1. explain what mean of ordinary and partial
- B2. classify the method of solving
- B3. Classify the differential equation

### Teaching and Learning Methods

By solving many exercises

### Assessment methods

10% homework

20% quiz

10% oral exam

20% mid exam

40% final exam

## D. General and Transferable Skills (other skills relevant to employability and personal development)

- D1.
- D2.
- D3.
- D4.

## 11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	3		Abstract of differential equation		
2	3		Separable equation		
3	3		Solve some example		
4	3		Homogenous equation		
5	3		Exact equation		
6	3		Linear equation		
7	3		Some example		
8	3		Bernoulli equation		
9	3		Second order differential equation		
10	3		Some example		
11	3		Laplace transform		
12	3		Power series , Fourier series		
13	3		Mid exam		
14	3		Review		
15	3		Final exam		

## 12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Lecture notes of Advance mathematics , by Makarim alturky
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## 13. Admissions

Pre-requisites	
Minimum number of students	20
Maximum number of students	40

