# **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	Computer science			
3. Course title/code	Discrete mathematics			
4. Programme(s) to which it contributes	At class			
5. Modes of Attendance offered	Attendance			
6. Semester/Year	2^nd / 2021-2022			
7. Number of hours tuition (total)	45			
8. Date of production/revision of this	1/4/2022			
specification				
9. Aims of the Course				
1- To Describe the aim of study discrete mathematic	28			
2- To Understand what difference between ordinary r	nath and discrete math.			
3- To Understand what the relation between comput	er science and math			
4- To Learn the operation between the difference objects of math.				
5- To Apply the relation between this objects				

10. Learning Outcomes, Teaching ,Learning and Assessment Method
A- Knowledge and Understanding A1. Understand the concept of ordinary and partial
A2. Understand the set theory A3. Understand the logic math
A4. Understand the relation of two sets
A5. Understand the graph theory
B. Subject-specific skills
B1. Summer Training
<ul><li>B2. Fourth year projects</li><li>B3. Scientific projects</li></ul>
Teaching and Learning Methods
- By solving many exercises
- Daily and weekly quizzes.
- Guiding the student to some electronic websites.
Assessment methods
10% homework
20% quiz
10% oral exam
20% mid exam
40% final exam

C. Thinking Skills

- C1. Develop the student's ability to work and provide homework in a timely manner.
- C2. Analyze the problem and find the solution based on the methods used in the various derivatives
- C 3. To develop the student's ability to debate.

#### Teaching and Learning Methods

- Managing the lecture to deal with the real problem that attracts the student to the topic of the lesson.
- Assigning groups of students with some activities.
- Make part of the grades for the assignments.

Assessment methods

- Active participation in the classroom is evidence of student commitment and responsibility.
- Commitment to the deadline in submitting assignments and research.
- The exams express commitment and cognitive and skill achievement.
  - D. General and Transferable Skills (other skills relevant to employability and personal development)
  - D1. Developing the student's ability to deal with technical methods.
  - D2. Developing the student's ability to deal with Internet.
  - D3. Developing the student's ability to deal with multi media.
  - D4. Developing the student's ability to discuss real problems.

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	3		Abstract of discrete mathematics		
2	3		Set theory		
3	3		Solve some example		
4	3		Logic		
5	3		Solve some example		
6	3		Functions		
7	3		Relation		
8	3		Some examples		
9	3		Graph theory		
10	3		Some example		
11	3		Tree		
12	3		Solve example		
13	3		Mid exam		
14	3		Review		
15	3		Final exam		

### 12. Infrastructure

### Required reading:

- · CORE TEXTS
- · COURSE MATERIALS
- · OTHER

Lecture notes of Discrete mathematics , by Makarim alturky

13. Admissions				
Pre-requisites				
Minimum number of students	20			
Maximum number of students	40			