Mutah University
Academic Development &Quality Assurance Center

COURSE PLAN SPECIFICATION FORM

Course: Abstract Algebra 2 for M.Sc. Course(742)

Faculty: Science

Department: Mathematics

Academic Year: 2017-2018

A. Course Specification & General Information:

• **University:Mutah**	**Course Title: Abstract Algebra 2**
College: Science	**Code: 742**
Department: MATHEMATICS	**Credit Hours: 3**
Semester& Academic Year: Second	**Instructor: Prof. Dr. Ibrahim Suleiman**
Office Hours: 1:00-2:00 Mon&Wed.	• **Course Level: M. Sc.**

B. Objectives and Expected Learning Outcomes
  • Review of basics and proofs of main theorem in the related subjects .

C. Course Plan Distribution

Week	Topics to be Covered
1.	Revision in Groups , Rings , Fields
2.	Main theorems and comparision between groups & Rings
3.	Fields and Extension Fields
4.	Nilpotent and Idempotents in Rings . Some main theorems
5.	R-Modules , product and sums of R-Modules
6.	Exact sequences and split exact sequences
7.	Simple and semi simple R-Modules , essential submodules
8.	The ring on endomorphisms of an R-Modules
9.	Regular rings (Vonumman Ring)
10.	More on Regular Rings
11.	Mid Term Exam
12.	The radical and socle of an R-Modules
13.	Notherian and Artinian Rings
14.	Notherian and Artinian R-modules
15.	Final revision

D.Methods of assessment

No.	Assessment task	Proportion of Final Assessment
1.	A Lecture for each student	10%
2.	1st Exam	20 %
3.	2nd Exam	20%
4.	Take home Exam before the final exam	10%
5.	Final Exam	40%
Total		(100%)

E. General Instructions:

No	Additional Notes, office hours, attendance policy, etc….
1	Attendence is absolutely essential to success in this class. You are expected to attend every class.
2	If a student is absent for more than 10% of lectures on the course without an excuse , he /she will be barred from the final examination .
3	My phone ,e-mail, Whatsup are available for serious questions and notifications .
4	iasuleiman@yahoo.com E-mail

References : These are some main references :

1- **Hungerford , Algebra , Holt, Rinehart and Winston**

2- **Dummit and Foot , Abstract Algebra, Prince-Hall International 1991**