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 | Al-Nahrain University/ College of Science | | | |
|---|---|--|--|--|
| 2. University Department/Centre | Mathematics & Computer Applications | | | |
| 3. Course title/code | Finite Math. | | | |
| 4. Modes of Attendance offered | | | | |
| 5. Semester/Year | First semester/ Year First | | | |
| 6. Number of hours tuition (total) | 60 hours | | | |
| 7. Date of production/revision of this specification | | | | |
| 8. Aims of the Course | | | | |
| Learning the basic concepts of mathematics, as mathematical induction, complex numbers and their properties, matrices: definition and some applications, solution of mathematical equations with first, and higher degrees. | | | | |
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9. Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Cognitive goals.

A1. Enabling the students to understand the basics of the scientific subjects A2. Providing the students with the maximum amount of mathematical terms and definitions

B. The skills goals special to the course.

B1. Providing the students with the sufficient amount of mathematical terms and definitions.

Teaching and Learning Methods

Lectures, Homework, some activities in the class, Electronic references

Assessment methods

Pre final exam 40% Final exam 60%

C. Affective and value goals
C1. Understanding the definition of function, continuous function, Limit and their applications
C2. Enabling the students to solve the problems about differentiation

Teaching and Learning Methods

Presenting on the wight board

Assessment methods

Final exam 60% Total 100% D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)
 D1.Providing the students with mathematical skills about differentiation to solve some real life problems

| 10. Course Structure | | | | | |
|----------------------|-------|---------------------------|---|--------------------|----------------------|
| Week | Hours | ILOs | Unit/Module or Topic Title | Teaching Method | Assessment Method |
| 1-2 | 8 | Mathematical Induction | Summation/induction | lectures | |
| 3-6 | 16 | Complex numbers | Definitions/ Solutions | lectures | |
| 7-9 | 12 | Complex numbers | Polor/Demouver/sq. root /root of complex | lectures | |
| 10-11 | 8 | Matrices | Linear Systems | lectures | |
| 12-13 | 8 | Polynomials | Definition /Properties/no.of root | lectures | |
| 14-15 | 8 | Polynomials | Cardan method/Solution of nonlinear | lectures | |

| 11. Infrastructure | | | |
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| 1. Books Required reading: | د. مصطفی احمد , Introduction to finite mathematics . د. جلال نعوم , د.محمد سردار | | |
| 2. Main references (sources) | د. رياض شاكر نعوم , د. سليم الكتبي,د. كاظم , 1. Applied method محمد الصومعي محمد الصومعي | | |
| A- Recommended books and references (scientific journals, reports). | Mathematics with application brief version | | |
| B-Electronic references, Internet sites | Google.com | | |
| 12. The development of the curriculum plan | | | |
| Including some real life applications | | | |