## HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

## PROGRAMME DESCRIPTION

The academic program includes teaching and learning methods and assessment methods for the courses in order to achieve the targeted educational outcomes with the awarded certificate and job qualifications.

| 1- Academic Institution | University of Mosul / College of education for <br> pure sciences |
| :--- | :--- |
| 2- Department | Mathematics |
| 3- Academic program |  |
| 4- Course level | Bachelor's degree |
| 5- Course mode | Full Time |
| 6- Course |  |
| 7- External activities |  |


| 8- Date | $1 / 10 / 2022$ |
| :--- | :--- |
| 9- Academic goals of the course; <br> a- Preparing high-level graduates in physics and its applications to take their roles in <br> public secondary schools. <br> b- Preparing students that have high quality teachings methods <br> c- Preparing high-level graduates in mathematics and its applications <br> d- <br> Graduate students should be ready to join high level courses to get degrees in <br> specific areas. |  |
| 10-Program outcomes and teaching methods for learning and assessment |  |
| a- Cognitive objectives |  |
| a1- Enable the students to understand the all fields of mathematics |  |
| a2- Preparing mathematics teachers with high quality skills |  |
| b- skill goals |  |
| b1- Skill of description of mathematics |  |
| b2- Skill of analysis of the experiments |  |

## 1.Learning outcomes, Teaching, Learning and assessment methods

## A. Understanding and knowledge

A1.The student will be able to understand the various subjects of Mathematics
A2. Preparing biology teachers at levels that keep pace with the up to date development.
B- Subject-specific skills
B1- The students acquire the skills of understanding and using Mathematics
B2- The students acquire the skills of Logical analysis
Teaching and Learning Methods
Theoretical and practical lectures, daily assignments, discussions

Assessment methods
Exams, daily assignments, lab reports, graduation projects

## C - thinking skills:

C1- The student acquires discussion skills
C2 - The student will be able to reach conclusions.
D- General and transferable skills (other skills related to employability and personal
development)
D 1- The ability to work in a multidisciplinary team.
D2 - The ability to communicate constructively.
Teaching and learning methods
Lectures, practical experiments, homework, discussions
Assessment Methods
Exams, daily homework, discussions, lab reports, graduation projects

| Stages | Program Sections |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Code | Name | Hours per week |  |
|  |  |  | Theoretical | practical |
| First year | EDMA21F101 | Calculus | 3 | 2 |
|  | EDMA21F102 | Foundation of Mathematics | 2 | 2 |
|  | EDMA21F103 | Linear Algebra | 2 | 2 |
|  | EDMA21F104 | Physics | 2 | -- |
|  | EDMA21F105 | Computers | 1 | 2 |
|  | EDMA21F106 | Educational Psychology | 2 | -- |
|  | EDMA21F107 | Principles Education | 2 | -- |
|  | EDMA21F108 | Human Right | 2 | -- |
|  | EDMA21F109 | Arabic Language | 2 | -- |
|  | EDMA21F110 | English Language | 1 | -- |


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Second <br> year | EDMA21F201 | Advanced Calculus | 2 | 3 |
|  | EDMA21F202 | Ordinary Differential <br> Equations | 2 | 2 |
|  | EDMA21F203 | EDMA21F205 | Programming | 1 |
|  | EDMA21F206 | Research Approach | 2 | 2 |
|  | EDMA21F207 | Growth Psychology | 2 | 2 |
|  | EDMA21F204 | Axioms and Geometry | 1 | -- |
|  | EDMA21F208 | Administration and <br> Secondary Education | 2 | -- |
|  | EDMA21F209 | English Language | 1 | -- |
| Third year | EDMA21F301 | Real Analysis | 2 | 2 |


|  | EDMA21F302 | Partial Differential <br> Equations | 2 | 2 |
| :---: | :---: | :---: | :---: | :---: |
|  | EDMA21F303 | Ring Algebra | 2 | 2 |
|  | EDMA21F304 | Probability and <br> Statistics | 2 | 2 |
|  | EDMA21F305 | Numerical Analysis | 2 | 2 |
|  | EDMA21F306 | Mythology and <br> Teaching Methods | 2 | -- |
|  | EDMA21F307 | Psychological Heath <br> and Guidance | 2 | -- |
| EDMA21F308 <br> Fourth <br> year | English language | 1 | 2 |  |
|  | EDMA21F401 | Topology | 2 | 2 |
|  | EDMA21F403 | Selective (1) | 2 | 2 |
|  | EDMA21F404 | Selective (2) | 2 | 2 |


|  | EDMA21F405 | Complex Analysis | 2 | 2 |
| :---: | :---: | :---: | :---: | :---: |
|  | EDMA21F406 | Graduated Project | 2 |  |
|  | EDMA21F407 | School Practice | 2 |  |
|  | EDMA21F408 | Measurement and <br> Evaluations | 2 | -- |
|  | EDMA21F409 | English language | 1 | -- |

## Syllabus Skills Outline

|  |  |  |  |  |  |  |  |  |  |  | lab | S | S | line |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * Please mark the boxes corresponding to the individual learning outcomes from the program being assessed |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Learning outcomes required from the program |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Major <br> Or optional | Name | Code | Stages |
| General and qualification skills (employability and personal development skills ) |  |  |  | Affection Goals |  |  |  | Skill goals |  |  |  | Cognitive objectives |  |  |  |  |  |  |  |
| 4d | 3d | 2d | 1d | 4c | 3 C | 2c | 1c | 4b | 3b | 2b | 1b | 4a | 3 a | 2a | 1 a |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | * | * | * | major | Calculus | EDMA21F101 | First year |
|  |  |  |  |  |  |  |  |  |  |  |  |  | * | * | * | major | Foundation of Mathematics | EDMA21F102 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | * | * | * | major | Linear Algebra | EDMA21F103 |  |
|  |  |  |  |  |  |  |  | * |  |  | * |  |  |  |  | major | Physics | EDMA21F104 |  |
|  |  |  |  |  |  |  |  |  |  |  | * |  |  |  |  | major | Computers | EDMA21F105 |  |
|  |  |  |  |  |  |  |  | * |  |  |  |  |  | * |  | major | Educational Psychology | EDMA21F106 |  |





|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | major | School <br> Practice | EDMA21F407 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | majorMeasurement <br> and <br> Evaluations | EDMA21F408 |  |  |
|  |  |  |  |  |  |  |  |  | $*$ |  |  |  |  |  | $*$ | major | English <br> language | EDMA21F409 |

