

Guidance Plan for the Department of Physics (2021-2022)**First Year**

| First Semester | | |
|-----------------------|--|----------------------|
| Pre-request | Course Title | Course Number |
| - | University Requirement | ----- |
| 0120001 | Introduction to information technology | 0125130 |
| - | Calculus 1 | 0101101 |
| - | Probability and statistics | 0101140 |
| | General Physics 1 | 0150111 |
| 0150111 | General Physics Lab 1 | 0150101 |

| Second Semester | | |
|------------------------|-------------------------------------|----------------------|
| Pre-request | Course Title | Course Number |
| - | General Chemistry for Physics Major | 0150141 |
| 0125130 | Programing Principles | 0112120 |
| 0125130 | Communication Skills | 0114150 |
| 0150111 | General Physics 2 | 0150121 |
| 0101101 | Calculus 2 | 0150103 |
| 0150121 | General Physics Lab 2 | 0150102 |

Second Year

| First Semester | | |
|-----------------------|---------------------------------|----------------------|
| Pre-request | Course Title | Course Number |
| 0101102 | Calculus 3 | 0150104 |
| 0150121 | Modern Physics | 0150231 |
| 0101102 | Ordinary Differential Equations | 0150273 |
| 0150121 | Mathematical Physics 1 | 0150251 |
| 0150121 | Optics | 0150211 |
| 0101221 | Linear Algebra 1 | 0101322 |
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| Second Semester | | |
|------------------------|---------------------------------|----------------------|
| Pre-request | Course Title | Course Number |
| 0150251 | Mathematical Physics 2 | 0150252 |
| 0150121 | Electronics | 0150221 |
| 0150121 | Computational Physics | 0150253 |
| 0420001 | Communication Skills in Arabic | 0420115 |
| - | University Requirement | ----- |
| 0420002 | Communication Skills in English | 0420123 |

Third Year

| First Semester | | |
|-----------------------|----------------------------|----------------------|
| Pre-request | Course Title | Course Number |
| 0150252 | Electromagnetic Theory 1 | 0150321 |
| 0150251 | Classical Mechanics 1 | 0150311 |
| 0150252+0150231 | Quantum Mechanics 1 | 0150331 |
| 0150252 | Thermodynamics | 0150341 |
| 0150221 | Electronics Lab | 0150301 |
| – | Elective University Course | ---- |

| Second Semester | | |
|------------------------|------------------------------|----------------------|
| Pre-request | Course Title | Course Number |
| 0150321 | Electromagnetic Theory 2 | 0150322 |
| 0150311 | Classical Mechanics 2 | 0150312 |
| 0150331 | Quantum Mechanics 2 | 0150332 |
| 0150211 | Optics Lab | 0150302 |
| موافقة القسم | Physics Teaching Methodology | 0150381 |
| – | University Requirement | ---- |

Fourth Year

| First Semester | | |
|-----------------------|----------------------------|----------------------|
| Pre-request | Course Title | Course Number |
| 0150332 | Solid State Physics | 0150461 |
| 0150331 | Nuclear Physics | 0150431 |
| 0150231 | Advanced Physics Lab | 0150401 |
| 0150331 | Nano-Physics | 0150432 |
| | Department Elective Course | ---- |
| | University Requirement | – |

| Second Semester | | |
|------------------------|-----------------------------|----------------------|
| Pre-request | Course Title | Course Number |
| موافقة القسم | Seminar research in Physics | 0150471 |
| 0150331+0150341 | Statistical Physics | 0150441 |
| | Department Elective Course | ---- |
| | Department Elective Course | ---- |
| – | Military Sciences | 0420101 |
| – | University Requirement | ---- |