



Karabük Üniversitesi

Faculty of Sciences

Chemistry

Kimya

| 1.Semester Course Plan | | | | |
|------------------------|--------------------------------------|-------|---------------------|------|
| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
| FIZ185 | General Physics I | 4+0+0 | Compulsory | 4 |
| FIZ189 | Physics Lab. I | 0+3+0 | Compulsory | 2 |
| KIM103 | Laboratory Technique and Safety | 2+0+0 | Compulsory | 2 |
| KIM115 | General Chemistry I | 4+2+0 | Compulsory | 8 |
| KIM117 | General Chemistry Lab. I | 0+4+0 | Compulsory | 4 |
| MAT189 | Mathematics I | 4+0+0 | Compulsory | 4 |
| TBT181 | Usage Of Basic Computer Technologies | 1+2+0 | Compulsory | 2 |
| TUR181 | Turkish Language I | 2+0+0 | Compulsory | 2 |
| YDL183 | Foreign Language I | 2+0+0 | Compulsory | 2 |
| Total ECTS | | | | 30 |

| 2.Semester Course Plan | | | | |
|------------------------|---------------------------|-------|---------------------|------|
| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
| FIZ186 | General Physics II | 4+0+0 | Compulsory | 4 |
| FIZ190 | Physics Lab. II | 0+3+0 | Compulsory | 2 |
| KIM118 | General Chemistry Lab. II | 0+4+0 | Compulsory | 3 |
| KIM146 | General Chemistry II | 4+2+0 | Compulsory | 8 |
| KIM182 | History Of Science | 2+0+0 | Compulsory | 2 |
| MAT188 | Mathematics II | 4+0+0 | Compulsory | 4 |
| TBT182 | Basic Computer Sciences | 2+2+0 | Compulsory | 3 |
| TUR182 | Turkish Language II | 2+0+0 | Compulsory | 2 |
| YDL184 | Foreign Language II | 2+0+0 | Compulsory | 2 |
| Total ECTS | | | | 30 |

| 3.Semester Course Plan | | | | |
|------------------------|--|-------|---------------------|------|
| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
| AIT281 | Ataturk S Principles and History Of Turkish Revolution I | 2+0+0 | Compulsory | 2 |
| KIM211 | Inorganic Chemistry I | 4+2+0 | Compulsory | 8 |
| KIM213 | Inorganic Chemistry Lab. I | 0+5+0 | Compulsory | 3 |
| KIM225 | Analytical Chemistry I | 4+2+0 | Compulsory | 8 |
| KIM227 | Analytical Chemistry Lab. I | 0+5+0 | Compulsory | 4 |
| FRM2G | Formation Elective Courses | - | Elective | 7 |
| SEÇ201 | Elective Course | - | Elective | 2 |
| SEÇ203 | Elective Course | - | Elective | 3 |
| Total ECTS | | | | 37 |

| | | | | |
|--------|--|-------|----------|---|
| DEG201 | Values Education | 2+0+0 | Elective | 2 |
| FRM201 | Introduction to Education | 3+0+0 | Elective | 4 |
| FRM203 | Classroom Management | 2+0+0 | Elective | 3 |
| KIM229 | Environmental Chemistry I | 3+0+0 | Elective | 3 |
| KIM285 | Reading & Speaking In Foreign Language | 2+0+0 | Elective | 2 |
| KIM287 | Chemistry Technologies | 2+0+0 | Elective | 2 |
| KIM289 | Pharmaceutical Chemistry | 3+0+0 | Elective | 3 |
| SOS281 | Values Education | 2+0+0 | Elective | 2 |

| 4.Semester Course Plan | | | | |
|------------------------|---|-------|---------------------|------|
| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
| AIT282 | Ataturk S Principles and History Of Turkish Revolution II | 2+0+0 | Compulsory | 2 |
| KIM216 | Inorganic Chemistry II | 4+2+0 | Compulsory | 7 |
| KIM218 | Inorganic Chemistry Lab. II | 0+5+0 | Compulsory | 3 |
| KIM222 | Introduction To Organic Chemistry | 2+0+0 | Compulsory | 2 |
| KIM226 | Analytical Chemistry II | 4+2+0 | Compulsory | 8 |
| KIM228 | Analytical Chemistry Lab. II | 0+5+0 | Compulsory | 3 |
| FRM2B | Formation Elective Courses | - | Elective | 8 |
| SEÇ202 | Elective Course | - | Elective | 2 |
| SEÇ204 | Elective Course | - | Elective | 3 |
| Total ECTS | | | | 38 |

| | | | | |
|--------|------------------------|-------|----------|---|
| FRM202 | Educational Psychology | 3+0+0 | Elective | 4 |
|--------|------------------------|-------|----------|---|

| | | | | |
|--------|-----------------------------------|-------|----------|---|
| FRM204 | Guidance and Special Education | 3+0+0 | Elective | 4 |
| KIM220 | Environmental Chemistry II | 3+0+0 | Elective | 3 |
| KIM286 | Foreign Language For Profession I | 2+0+0 | Elective | 2 |
| KIM288 | Food Chemistry | 2+0+0 | Elective | 2 |
| KIM290 | Analytical Separation Methods | 3+0+0 | Elective | 3 |

5.Semester Course Plan

| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
|-------------|----------------------------|-------|---------------------|-----------|
| KIM331 | Organic Chemistry I | 4+2+0 | Compulsory | 8 |
| KIM335 | Organic Chemistry Lab. I | 0+5+0 | Compulsory | 4 |
| KIM341 | Physical Chemistry | 4+2+0 | Compulsory | 8 |
| KIM343 | Physical Chemistry Lab. I | 0+5+0 | Compulsory | 4 |
| FRM3G | Formation Elective Courses | - | Elective | 4 |
| SEÇ301 | Elective Course | - | Elective | 2 |
| SEÇ303 | Elective Course | - | Elective | 4 |
| | | | Total ECTS | 34 |

| | | | | |
|--------|---|-------|----------|---|
| FRM301 | Measurement and Evaluation in Education | 3+0+0 | Elective | 4 |
| FRM303 | Teaching Principles and Methods | 3+0+0 | Elective | 4 |
| KIM345 | Polymer Chemistry I | 4+0+0 | Elective | 4 |
| KIM381 | Foreign Language For Profession II | 2+0+0 | Elective | 2 |
| KIM385 | Occupational Health and Safety | 2+0+0 | Elective | 2 |
| KIM387 | Inorganic Chemical Technology | 2+0+0 | Elective | 2 |
| KIM389 | Qualitative Organic Analysis | 4+0+0 | Elective | 4 |

6.Semester Course Plan

| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
|-------------|----------------------------|-------|---------------------|-----------|
| KIM332 | Organic Chemistry II | 4+2+0 | Compulsory | 8 |
| KIM336 | Organic Chemistry Lab. II | 0+5+0 | Compulsory | 4 |
| KIM342 | Physical Chemistry II | 4+2+0 | Compulsory | 8 |
| KIM344 | Physical Chemistry Lab. II | 0+5+0 | Compulsory | 4 |
| FRM3B | Formation Elective Courses | - | Elective | 7 |
| SEÇ302 | Elective Course | - | Elective | 4 |
| SEÇ304 | Elective Course | - | Elective | 2 |
| | | | Total ECTS | 37 |

| | | | | |
|--------|--|-------|----------|---|
| FRM302 | Instructional Technology | 2+0+0 | Elective | 3 |
| FRM304 | Special Teaching Methods | 3+0+0 | Elective | 4 |
| KIM346 | Polymer Chemistry II | 4+0+0 | Elective | 4 |
| KIM382 | Foreign Language For Business Life | 2+0+0 | Elective | 2 |
| KIM386 | Textile and Dyeing Chemistry | 2+0+0 | Elective | 2 |
| KIM388 | Spectroscopic Methods In Organic Chemistry | 4+0+0 | Elective | 4 |

7.Semester Course Plan

| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
|-------------|------------------------------|-------|---------------------|-----------|
| KIM401 | Biochemistry I | 4+0+0 | Compulsory | 4 |
| KIM403 | Biochemistry Lab.I | 0+4+0 | Compulsory | 3 |
| KIM411 | Industrial Chemistry I | 4+0+0 | Compulsory | 4 |
| KIM413 | Industrial Chemistry Lab. I | 0+4+0 | Compulsory | 3 |
| KIM415 | Chemical Research Project II | 0+2+0 | Compulsory | 2 |
| FRM4G | Formation Elective Courses | - | Elective | 10 |
| SEÇ401 | Elective Course | - | Elective | 8 |
| SEÇ403 | Elective Course | - | Elective | 6 |
| | | | Total ECTS | 40 |

| | | | | |
|--------|--|-------|----------|----|
| FRM400 | Teaching Practice | 1+8+0 | Elective | 10 |
| KIM421 | Instrumental Analysis I | 2+2+0 | Elective | 6 |
| KIM431 | Fuel Chemistry and Technology | 2+2+0 | Elective | 6 |
| KIM441 | Coordination Chemistry | 4+0+0 | Elective | 4 |
| KIM443 | Ceramic Chemistry | 4+0+0 | Elective | 4 |
| KIM451 | Colloids Chemistry | 4+0+0 | Elective | 4 |
| KIM455 | Materials Chemistry | 4+0+0 | Elective | 4 |
| KIM461 | Introduction To Organic Reaction Mechanism | 4+0+0 | Elective | 4 |
| KIM467 | Surface Active Materials | 4+0+0 | Elective | 4 |

8.Semester Course Plan

| Course Code | Course Name | T+A+L | Compulsory/Elective | ECTS |
|-------------|---------------------|-------|---------------------|------|
| KIM402 | Biochemistry II | 4+0+0 | Compulsory | 6 |
| KIM404 | Biochemistry Lab II | 0+4+0 | Compulsory | 3 |

| | | | | |
|-----------------------|--|-------|-------------------|-----------|
| KIM412 | Industrial Chemistry II | 4+0+0 | Compulsory | 5 |
| KIM416 | Chemical Research Project II | 0+2+0 | Compulsory | 2 |
| FRM4B | Formation Elective Courses | - | Elective | 10 |
| SEÇ402 | Elective Course | - | Elective | 8 |
| SEÇ404 | Elective Course | - | Elective | 6 |
| | | | Total ECTS | 40 |
| FRM400 | Teaching Practice | 1+8+0 | Elective | 10 |
| KIM422 | Instrumental Analysis Lab. | 0+4+0 | Elective | 6 |
| KIM426 | Polymer Chemistry Lab. | 0+4+0 | Elective | 6 |
| KIM432 | Selected Topics In Spectroscopy | 4+0+0 | Elective | 4 |
| KIM442 | Introduction To Inorganic Reaction Mechanism | 4+0+0 | Elective | 4 |
| KIM444 | Metal Chemistry | 4+0+0 | Elective | 4 |
| KIM446 | Industrial Stoichiometry | 4+0+0 | Elective | 4 |
| KIM452 | Chemical Kinetic | 4+0+0 | Elective | 4 |
| KIM456 | Introduction To Electrochemistry | 4+0+0 | Elective | 4 |
| KIM458 | Polymer Technology | 4+0+0 | Elective | 4 |
| KIM462 | Heterocyclic Chemistry | 4+0+0 | Elective | 4 |
| KIM466 | Spectroscopic Methods In Organic Chemistry | 4+0+0 | Elective | 4 |
| ELECTIVE COURSES POOL | | | | |
| KIM000 | English Preparatory Year | 0+0+0 | Compulsory | 0 |