PARK

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Student ID: Student Name: Advisor Name:	Catalog: 2020-2021 Undergraduate Catalog Program: Chemistry, B.S.

Chemistry, B.S.

Requirements For: B.S. Major - 71 Hours, 2.0 GPA

In contemporary society, it is evident that the science of chemistry is no longer confined to the research laboratory, but is exerting a profound impact on social, political, and economic decisions at the local, national, and international levels. Chemistry is the recognized physical basis for the biological and psychological sciences and is important in every effort of our industrialized society. Students wishing to pursue a career in the chemical profession, medicine, dentistry, veterinary medicine, laboratory technology, or the environmental sciences are encouraged to consider the major program in chemistry with appropriate minors in other disciplines for their preparatory work.

The Department of Natural and Physical Sciences welcomes partnerships with appropriate businesses and government agencies to place students into internship positions in their major or a related field. The Department of Natural and Physical Sciences actively encourages students to work in such internship positions and considers internships to be an integral part of the curriculum.

Course Name	Credits:	Term Taken	Grade
CH 107 - General Chemistry I Corequisite(s): MA 125 or higher and CH 107L which is a separate course that can be waived by permission of the instructor.	Credits: 3		
CH 107L - General Chemistry Laboratory I Corequisite(s): CH 107 which is a separate course that can be waived by permission of the instructor.	Credits: 1		
CH 108 - General Chemistry II Prerequisite(s): 'C' or better in CH 107 or permission of instructor.	Credits: 3		
Corequisite(s): CH 108L which is a separate course that can be waived by permission of the instructor.			
CH 108L - General Chemistry Laboratory II Prerequisite(s): 'C' or better in CH 107L or permission of instructor.	Credits: 1		
Corequisite(s): CH 108 which is a separate course that can be waived by permission of the instructor.			
CH 317 - Organic Chemistry I Prerequisite(s): CH 108.	Credits: 3		
Corequisite(s): CH 317L except in 8-week programs. which is a separate course that can be waived by permission of the instructor.			
CH 317L - Organic Chemistry Laboratory I Corequisite(s): CH 317 which is a separate course that can be waived by permission of the instructor.	Credits: 1		
CH 318 - Organic Chemistry II Prerequisite(s): CH 317.	Credits: 3		
Corequisite(s): CH 318L which is a separate course that can be waived by permission of the instructor.			
CH 318L - Organic Chemistry Laboratory II Corequisite(s): CH 318 which is a separate course that can be waived by permission of the instructor.	Credits: 1		
CH 328 - Analytical Chemistry Prerequisite(s): CH 108 and CH 108L.	Credits: 4		
CH 329 - Introduction to Instrumental Analysis Prerequisite(s): CH 328	Credits: 4		
CH 342 - Advanced Inorganic Chemistry Prerequisite(s): Any of the following: CH 317, CH 318, CH 328, CH 329 and CH 337.	Credits: 4		
CH 407 - Physical Chemistry I Prerequisite(s): CH 108 and PY 206 and MA 222.	Credits: 4		

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Corequisite(s): MA 223.	
CH 408 - Physical Chemistry II Prerequisite(s): CH 407 and one of the following: MA 223, MA 302, or MA 311.	Credits: 4
MA 221 - Calculus and Analytic Geometry for Majors I Prerequisite(s): MA 160.	Credits: 5
MA 222 - Calculus and Analytic Geometry for Majors II Prerequisite(s): MA 221 or equivalent	Credits: 5
MA 223 - Calculus and Analytic Geometry for Majors III Prerequisite(s): MA 222 or equivalent	Credits: 3
NS 302 - Current Literature in the Natural Sciences	Credits: 1
NS 401 - Natural Science Seminar	Credits: 1
PY 205 - Introduction to Physics I Prerequisite(s): MA 221.	Credits: 5
Corequisite(s): MA 222.	
PY 206 - Introduction to Physics II Prerequisite(s): PY 205.	Credits: 5

Electives selected from the following: 10 cr.

Course Name	Credits:	Term Taken	Grade
CH 321 - Introduction to Medicinal Chemistry Prerequisite(s): CH 318.	Credits: 3		
CH 337 - Biochemistry Prerequisite(s): CH 318 and CH 318L	Credits: 3		
Corequisite(s): BIO 337L which is a separate course that can be waived by permission of the instructor.			
CH 337L - Biochemistry Laboratory Corequisite(s): BIO 337 which is a separate course that can be waived by permission of the instructor.	Credits: 1		
CH 400 - Special Topics in Chemistry	Credits: 1-4		
CH 429 - Advanced Analytical Chemistry Prerequisite(s): CH 318, CH 329.	Credits: 4		
CH 440 - Organic Synthesis Prerequisite(s): CH 318.	Credits: 4		
CH 451 - Internship to Chemistry	Credits: 1-6		
CH 490 - Research in Chemistry	Credits: 1-6		

Note:

PASSING A WRITTEN COMPREHENSIVE EXAMINATION IS REQUIRED.

B.S.E. in Secondary Education - MAJOR 48-50 Hours

2.75 Cum G.P.A.

2.75 Core G.P.A.

**For those students wishing to obtain a secondary teaching certificate in Chemistry, see also Bachelor of Science in Education.

***For those student interested in an engineering degree in addition to a chemistry degree, see also Dual Degree Engineering.

Liberal Education Requirements

Student Seminar 3 cr.

LE 100 First-Year Seminar

Writing Seminar 6 cr.

EN 105 and EN 106

Math Requirement 3 cr.

Select one of the following:

MA 120, MA 135, or higher math course excluding MA 208

Ethics Requirement 3 cr.

Select one of the following:

CA 302, CS 300, EDU 310, MG 495, NS 306, PA 380, PH 102, PH 221, PH 308, PS 220, SO 220 or SW 492

Humanities Requirement 6 cr.

Select one of the following Art or English:

AR 115, AR 215, AR 216, EN 201, EN 221, EN 232, EN 234

And one of the following:

AR 115, AR 215, AR 216, EN 201, EN 221, EN 232, EN 234, CA 104, CA 116, CA 235, FR 201, ML 235, ML 251, PH 101, PC 202, PH 205, RE 109, SP 110, SP 201, SP 202, TH 100, TH 101, TH 201, TH 216

Natural Science Requirement 3 cr.

Select one of the following:

BI 214, CH 101, CH 102, CH 107 and CH 107L, CH 108 and CH 108L, GGP 115, GGP 120, GGP 205, GO 125, GO 130, GO 141, GO 151, GO 200, NS 220, NS 241, PY 101, PY 155, PY 156, PY 205, or PY 206

*Computer Science and PE courses excluded.

Science with a lab Requirement 4 cr.

Select one of the following:

BI 101, BI 111, BI 223, BI 211, BI 212, BIO 221, BIO 225, BIO 325, BIO 327, BIO 330, BIO 337L and BIO 337, BIO 350, BIO 378, BIO 400, BIO 410, BIO 411, BIO 417, CH 107L and CH 107, CH 108L and CH 108, CH 317L and CH 317, CH 318L and CH 318, CH 328, CH 329, CH 337L and CH 337, CH 405, CH 440, GGP 115, GGP 205, GO 130, GO 141, GO 151, GO 200, GO 310, GO 320, GO 330, PY 155, PY 156, PY 205, or PY 206

Citizenship Requirement 3 cr.

Select one of the following:

PO 200, PO 210, HIS 111, HIS 112, or HIS 113

Communications Requirement 3 cr.

Select one of the following:

CA 103, CA 105, or TH 105

Social Science Requirement 6 cr.

Select two of the following:

AN 100, CJ 100, CJ 200, EC 141, EC 142, EDU 210, FI 201, GGH 110, GGH 200, HIS 104, HIS 105, PO 216, PS 101, PS 125, PS 205, SO 141, SO 206, or SW 205

Seminar: Integrative & Interdisciplinary Learning 3 cr.

Select one of the topics for LE 300*

Graduation Requirements

Upper Division Hours 36 cr.

36 hours upper division (300 - 400) level course work

Professional Writing Requirement 3 cr.

 $EN\ 306A\ , EN\ 306B\ , EN\ 306C\ , EN\ 307\ , EDU\ 300\ , CJ\ 450\ , HIS\ 306\ , HIS\ 452\ , HIS\ 453\ , HIS\ 454\ , HIS\ 455\ , MG\ 306\ , NS\ 306\ , PA\ 430\ , PO\ 405\ , PS\ 300\ , PS\ 406\ , or\ SO\ 300$

Additional Requirements

Park University grants the Bachelor of Science, Bachelor of Public Administration, Bachelor of Science in Education, Bachelor of Fine Arts, and the Bachelor of Music Degree upon completion of the following requirements:

- Completion of a minimum of 120 semester hours with a cumulative 2.0 GPA (or higher dependent on major).
- A minor for Geography and Information Systems majors.
- Satisfaction of all requirements for a major.
- Completion of degree specific requirements.
- Completion of Liberal Education requirements.

• Completion of residency requirement, 30 hours of earned and graded (A, B, C, D) college hours at Park University. At least 15 of these 30 hours must be in the major.
Notes: