Student Name _____ Catalog Year _____ Graduation Year _____

Biophysical Chemistry Major*

Requirements[1]:

____	CHEM 131	General Chemistry I	(F,Sp,Su)	3
____	CHEM 132	General Chemistry II	(Sp,Su,F)	3
____	CHEM 135L[2]	Special General Chemistry Lab I	(F)	1
____	CHEM 136L[2]	Special General Chemistry Lab II	(Sp)	2
____	CHEM 241	Organic Chemistry I	(F)	3
____	CHEM 242	Organic Chemistry II	(Sp)	3
____	CHEM 270(B)	Inorganic or Bioinorganic Chemistry I	(Sp)	3
____	CHEM 287L[3]	Integrated Inorganic/Organic Lab I	(F)	2
____	CHEM 288L[3]	Integrated Inorganic/Organic Lab II	(Sp)	2
____	CHEM 331	Physical Chemistry I	(Sp)	3
____	CHEM 336L	Applied Physical Chemistry Laboratory	(Sp)	2
____	CHEM 351	Analytical Chemistry	(F)	4
____	CHEM 361	Biochemistry I	(F,Sp)	3
____	CHEM 363	Biophysical Chemistry w/Lit & Sem	(F)	3
____	CHEM 367L	Biochemistry Laboratory	(F)	2
____	CHEM 368L	Biophysical Chemistry Laboratory	(Sp)	2
____	CHEM 432	Physical Chemistry II	(F)	3
____	BIO 140/140L	Foundations of Biology I	(F,Sp,Su)	4
____	BIO 240[4] /240L	Genetics	(F,Sp)	4
____	BIO 480*/480L	Advanced Molecular Biology	(F,Sp)	4
____	MATH 235[5]	Calculus I	(F,Sp,Su)	4
____	MATH 236	Calculus II	(F,Sp,Su)	4
____	MATH 237	Calculus III	(F,Sp,Su)	4
____	MATH 238	Linear Algebra with Differential Eqns	(F,Sp,Su)	4
____	PHYS 240	University Physics I	(F, Sp)	3
____	PHYS 250	University Physics II	(Sp,F)	3
____	PHYS 240L	University Physic Lab I	(F)	1
____	PHYS 250L	University Physics Lab II	(Sp)	1
____	At Least Two Approved Electives (see list at right)		(F,Sp)	6-8
				86-88

[1]These courses may NOT be taken credit / no credit
[2]CHEM 131L and 132L (2 credits) may substitute for CHEM 135L and 136L
[3]CHEM 242L (2 credits) may substitute for CHEM 287L-288L
[4]Non-PPH students should contact **biodept@jmu.edu** for permission to enroll in BIO 240 without the BIO 150 pre-req. Include name, ID#, major and specific BIO 240 section numbers for lecture and lab.
[5] MATH 231 and 232 (6 credits) may substitute for MATH 235

Approved Electives (All Majors must choose at least two)*

CHEM 362	Biochemistry II	(Sp)	3
CHEM 375	Intro to Material Science	(F)	3
CHEM 440	Intermediate Organic Chemistry	(F even)	3
CHEM 445	Polymer Chemistry	(F odd)	3
CHEM 445L	Polymer Chemistry Lab	(F,odd)	1
CHEM 455	Lasers & Applications to Phys Sci	(F even)	3
CHEM 470	Inorganic Chemistry II	(F)	3
CHEM 390	Problems in Chemistry	(F,Sp)	1-4
CHEM 497	Undergraduate Chemical Research	(F,Sp)	2-4
CHEM 499	Honors	(F,Sp)	6
BIO 324	Human Genetics	(F)	3
BIO 445	Neurobiology	(V)	4
BIO 494	Internship in Biology	(V)	6
BIO 497	Biological Research	(V)	1-2
BIO/MATH 342	Mathematical Models in Bio	(Sp)	3
BIO/MATH 454	Intro to Biometrics	(Sp)	4
MATH 318	Intro to Probability & Statistics	(F,Sp)	4
MATH 497-498	Independent Study	(V)	1-3
MATH 499	Honors	(V)	6
PHYS 260	University Physics III	(Sp)	3
PHYS 270	Modern Physics	(F)	4
PHYS 326	Biophysics	(V)	3
PHYS 398	Independent Study in Physics	(V)	1-4
PHYS 498R	Undergraduate Research in Phys	(V)	1-6
PHYS 499	Honors	(V)	6
PHYS/MATS 381	Materials Characterization	(V)	3

Any 300-400 level CHEM, PHYS or MATH course preapproved by advisor

(F = Fall, Sp = Spring, Su = Summer, V = varied, all are subject to change)

*It is the student's responsibility to meet any required co- or pre- requisites.

Updated April 2021