

Chemistry & Physics

BS Ed - Physics Education, 53 hours Certifies Grades 9-12

Suggested Course Outline

Freshman

Freshman Seminar	71-101	1	Composition	10-112	3
Composition	10-111	3	Calculus I	17-120	4
Precalculus (Math ACT under 27)	17-117	4	Fund of Oral Communications	29-102	3
Computational Methods in Science	40-106	3	Computer Programming I	44-141 or 44-149	3
General Chemistry I & Lab	24-114/115	4	America – A Historical Survey	33-155	3
Total		15	Total		16

Summer: Western Civilization II 26-103 3

Sophomore

Practicum I	65-260	1	Introduction to Special Ed	66-371	2
Educational Psychology	08-303	3	Multivariate Calculus	17-321	4
Fund Classical Physics I & Lab (F)	25-120/121	5	Fund Classical Physics II & Lab (S)	25-230/231	5
Calculus II	17-121	4	Humanities / Philosophy		3
General Biology	04-102/103	4	Intro to Literature	10-220	3
					17

Total 17 Take CBASE Seek admission to Prof Ed Program

Summer: Earth Science 27-114/115 4

Junior

Intro to Modern Physics & Lab (Fo)	25-350/351	4		Physics Practicum	25-489	1
Fine Arts		3		History of Science and Tech (S)	28-550	3
Electricity & Magnetism (Fe)	25-330/331	4	← or →	Modern Physics II (Se)	25-352	3
Intro to Government	34-102	3		Classical Mechanics & Lab (So)	25-320/321	4
Adolescent Psychology	08-322	2		Multiculturalism in Education	61-569	3
Reading in the Content Area	66-353	2		Computational Physics & Lab (So)	25-450/451	4
				Environmental Issues (S)	04-420	3
Total		14-18		Total		17-21

Senior

Electronics & Lab (Fo)	25-332/333	4			
Physics Practicum	25-489	1	**Professional Trimester**		
Practicum II	65-360	1	Classroom Management Seminar	65-521	1
School and Society	61-461	2	School & Society	61-462	1
Methods in Sec School Science (F)	28-580	3			
Classroom Management	65-520	2	Dir Teaching in the Sec School	65-490	10
Total		13	Total		12

- If one has not taken a substantial high school chemistry course, Chemistry 112/113 should be taken prior to Chemistry 114/115. Furthermore, student needs to have mastered Algebra II in high school.
- Without an ACT of 27, students must first complete 17-118 and 17-119 or take 17-117. Students with a 27 or above on the Mathematics ACT subscore are eligible to begin with Calculus I (4 more elective hours are required).

• Fo Fall Odd Years Fe Fall Even Years So Spring Odd Years Se Spring Even

(Please note this outline does not supersede the requirements listed in the Northwest Undergraduate Student Catalog nor does it constitute a contractual arrangement, rather it is for information only. It is the student's responsibility to be aware of and to meet all University and Department requirements as listed in the catalog.