

Chemistry & Physics

BS Ed Unified Science Major in Physics, 65 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	General Chemistry II & Lab	24-116/117	4
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		17
Summer: Western Civilization II	26-103	3	General Earth Science & Lab	27-114/115	4

Sophomore

Calculus II	17-121	4	Multivariate Calculus	17-321	4
General Botany & Lab *	04-112/113	4	General Zoology & Lab	04-114/115	4
Fund of Classical Physics I & Lab	25-120/121	5	Fund of Classical Physics II & Lab	25-230/231	5
Secondary Teach Practicum I	65-260	1	Intro to Special Education	66-371	2
Educational Psychology	08-303	3	Fund of Oral Communication	29-102	3
Total		17	Total		18
Summer: American Government	34-102	3	Intro to Literature	10-220	3

Junior

Historical Geology & Lab (F alt S)	27-212/213	4	Physics Practicum	25-489	1
Electricity & Magnetism (Fe)	25-330/331	4	Environmental Issues (S)	04-420	4
Intro to Modern Physics & Lab (Fo)	25-350/351	4	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	Modern Physics II (Se)	25-352	3
Total		16	History of Science & Tech	28-550	3
Summer: Fine Arts		3	Total		14

Senior

Electronics & Lab (Fo)	25-332/333	4	**Professional Trimester**		
Physics Practicum	25-489	1	Classroom Management Seminar	65-521	1
Physics Elective		3	School & Society	61-462	1
Practicum II	65-360	1	Dir Teaching in the Sec School	65-490	10
School and Society	61-461	2	Total		12
Methods in Sec School Science (F)	28-580	3			
Classroom Management	65-520	2			
Total		16			

- 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 two years of biology in high school, Biology 102/103 needs to be taken prior to Biology 112/113 or 114/115.
- 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

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.

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