

Central Community College and UNK

Plan of Study - Physics Comprehensive, Engineering Emphasis

Catalog: 2017-2018



Date Revised: 7/6/17

Central Community College			UNK		
Course No.	Course Title	Required Credits	Course No.	Course Title	Required Credits
Courses to be completed at Central Community College					
General Studies coursework required					
Foundational Core					
Written Communication (Needs to take ENGL 1020)					12
Math (Needs to take MATH 1600)					3
ENGL 1010	English Composition	3	ENG 101	Introduction to Academic Writing	3
ENGL 1020	Writing and Research	3	ENG 102GS	Academic Writing and Research	3
MATH 1150	College Algebra	3	MATH 102GS	College Algebra	3
MATH 1380	Trigonometry	3	MATH 103GS	Plane Trigonometry	3
MATH 1410	Pre-Calculus	5	MATH 103GS	Plane Trigonometry	3
MATH 1600	Analytic Geometry and Calculus I	5	MATH 115	Calculus I with Analytic Geometry	5
MATH 2000	Mathematics for Elementary Teachers	3	MATH 230GS	Math for Elementary Teachers I	3
MATH 2020	Applied Statistics	3	MATH 241GS	Elementary Statistics	3
MATH 2040	Applied Calculus	3	MATH 123GS	Applied Calculus	3
Oral Communication					3
SPCH 1110	Public Speaking	3	SPCH 100GS	Fundamentals of Speech	3
SPCH 1400	Oral Communication	3	SPCH 100GS	Fundamentals of Speech	3
Democracy in Perspective					3
EDUC 1110	Introduction to Education	3	TE 100	Teaching in a Democratic Society	3
HUSR 1100	Introduction to Human and Social Services	3	SOWK 170GS	Introduction to Social Welfare	3
MART 1010	Mass Media	3	JMC 100GS	Global Media Literacy	3
Portal Course					3
Students transferring in 24 or more hours of General Studies credit are exempt from taking the Portal, but must still complete a total of 45 hours of General Studies credit.					
Distribution					27
Aesthetics					3
ARTS 1010	Introduction to the Visual Arts	3	ART 120GS	Art Appreciation	3
ARTS 1250	Art Fundamentals	3	ART 100GS	Art Structure	3
MUSC 1010	Introduction to Music	3	MUS 100GS	Introduction to Music	3
MUSC 2700	History of Jazz	3	MUS 106GS	Introduction to Jazz and Blues	3
MUSC 2730	History of Rock Music	3	MUS 107GS	Introduction to Rock and Blues	3
THEA 1010	Introduction to Theatre	3	THEA 120GS	Introduction to the Theatre	3
Humanities (At least 6 credit hours from 2 disciplines required)					6
ENGL 2100	Introduction to Literature	3	ENG 254GS	Introduction to Literature: Special Topics	3
ENGL 2340	American Literature	3	ENG 251GS	Introduction to Literature: American Literature	3
ENGL 2370	Non-Western Literature	3	ENG 253GS	Introduction to Literature: Non-Western Civilization	3
HIST 1000	Western Civilization to 1700	3	HIST 210GS	Western Civilization	3
HIST 1010	Western Civilization after 1700	3	HIST 211GS	Western Civilization	3
HIST 1700	World Civilization to 1500	3	HIST 210GS	Western Civilization	3
HIST 1710	World Civilization after 1500	3	HIST 211GS	Western Civilization	3
HIST 2010	American History I	3	HIST 250GS	American History	3
HIST 2020	American History II	3	HIST 251GS	American History	3
HIST 2150	Introduction to Latin America	3	HIST 215GS	Introduction to Latin America	3
PHIL 1010	Introduction to Philosophy	3	PHIL 100GS	Introduction to Philosophy	3
SPAN 2010	Intermediate Spanish I	3	SPAN 200GS	Intermediate Spanish I	3
SPAN 2020	Intermediate Spanish II	3	SPAN 201GS	Intermediate Spanish II	3
Social Sciences (At least 6 credit hours from 2 disciplines required)					6
ANTH 1100	Introduction to Anthropology	3	SOC 250GS	Anthropology	3
CRIM 1010	Introduction to Criminal Justice	3	CJUS 101GS	Introduction to Criminal Justice	3
ECON 1100	Economic Understanding	3	ECON 100GS	Contemporary Economic Issues	3
ECON 2110	Principles of Macroeconomics	3	ECON 270GS	Principles of Economics, Macroeconomics	3
ECON 2120	Principles of Microeconomics	3	ECON 271GS	Principles of Economics, Microeconomics	3
GEOG 1400	Cultural Geography	3	GEOG 106GS	Human Geography	3
HUMS 2200	Introduction to Women's Studies	3	WSTD 220GS	Women's and Gender Studies	3
POLS 1000	American Government	3	PSCI 110GS	Introduction to American Politics	3
POLS 1600	International Relations	3	PSCI 168GS	Introduction to International Relations	3
PSYC 1010	Psychology of Family	3	FSID 351GS	Marriage and Family Relationships	3

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PSYC 1810	Introduction to Psychology	3	PSY 203GS	General Psychology	3
PSYC 2890	Developmental Psychology	3	PSY 230GS	Human Development	3
SOCI 1010	Introduction to Sociology	3	SOC 100GS	Introduction to Sociology	3
SOIC 2150	Issues of Unity and Diversity	3	ETHS 101GS	Introduction to Ethnic Studies	3
SOCI 2160	Marriage and Family	3	FSID 351GS	Marriage and Family Relationships	3
Natural Sciences (Needs to take PHYS 2110)					8
BIOS 1010	General Biology	4	BIOL 103GS	General Biology	4
BIOS 1090	General Botany	4	BIOL 105GS	Biology I	4
BIOS 1120	Principles of Zoology	4	BIOL 106GS	Biology II	4
BIOS 2490	Principles of Microbiology	4	BIOL 211GS	Human Microbiology	4
CHEM 1050	Elements of Chemistry	4	CHEM 145GS	Introductory Chemistry	4
CHEM 1060	Basics of Organic Chemistry	4	CHEM 150GS	Introduction to Organic and Biochemistry	4
CHEM 1090	General Chemistry	4	CHEM 160GS	General Chemistry	3
			CHEM 160LGS	General Chemistry Laboratory	1
CHEM 1100	General Chemistry II	4	CHEM 161GS	General Chemistry	3
			CHEM 161LGS	General Chemistry Laboratory	1
PHYS 1500	Introduction to Physical Geography with Lab	4	GEOG 102GS	Physical Geography II: The Lithosphere	4
BIOS 1060	Environmental Science	3	PHYS 201GS	Earth Science	4
BIOS 1070	Environmental Science Lab	1			
PHYS 1010	Earth Science	3	PHYS 201GS	Earth Science	4
PHYS 1100	Physical Science	4	PHYS 100GS	Physical Science	3
			PHYS 100LGS	Physical Science Laboratory	1
PHYS 1410	General Physics I	5	PHYS 205GS	General Physics I	4
			PHYS 205LGS	Physics I Laboratory	1
PHYS 1420	General Physics II	5	PHYS 206GS	General Physics II	4
			PHYS 206LGS	Physics II Laboratory	1
PHYS 2010	Meteorology: Intro to Atmosphere	4	PHYS 209GS	Meteorology	3
PHYS 2110	General Physics I with Calculus	5	PHYS 275GS	General Physics I (Calculus)	4
			PHYS 275LGS	General Physics I (Calculus) Laboratory	1
PHYS 2120	General Physics II with Calculus	5	PHYS 276GS	General Physics II (Calculus)	4
			PHYS 276LGS	General Physics II (Calculus) Laboratory	1
Analytical and Quantitative Thought (Needs to take at UNK)					3
MATH 2020	Applied Statistics	3	MGT 233GS	Business Statistics	3
BSAD 2020	Business Statistics	3	MGT 233GS	Business Statistics	3
BTEC 1110	Computer and Internet Literacy	3	CSIT 108GS	Computers in Society	3
BTEC 1710	Word Specialist	2	CSIT 1001GS	Computing Environments: Word Processing	3
BTEC 2310	Microsoft Excel Specialist Certification Preparation	1			
BTEC 1720	Excel Specialist	2	CSIT 1002GS	Computing Environments: Spreadsheet	3
BTEC 2320	Microsoft Excel Specialist Certification Preparation	1			
BTEC 1740	Access Specialist	2	CSIT 1003GS	Computing Environments: Date Base	3
BTEC 2340	Microsoft Access Specialist Certification Preparation	1			
INFO 1100	Introduction to Information Technology and Systems	3	ITEC 150GS	Internetworking Literacy	3
INFO 1120	Microcomputer Applications	3	MIS 182GS	Software Productivity Tools	3
INFO 1210	Spreadsheets	3	CSIT 1002GS	Computing Environments: Spreadsheet	3
INFO 1380	Technology in Society	3	CSIT 108GS	Computers in Society	3
INFO 1670	IT Essentials	3	ITEC 150GS	Internetworking Literacy	3
INFO 1700	Database Concepts and Design	3	CSIT 1003GS	Computing Environments: Date Base	3
INFO 1800	Visual Basic Programming	3	CSIT 111GS	Applied Computer Programming	3
INFO 2820	JAVA Programing	3	CSIT 130GS	Introduction to Computer Science	4
INFO 2830	C# Programming	3	CSIT 111GS	Applied Computer Programming	3
MUSC 1470	Music Theory I	3	MUS 200GS	Theory I	3
Wellness					0
NUTR 1470	Nutrition	3	FSID 110GS	Introduction to Nutrition	3
BSAD 1010	Consumer Problems	3	FSID 160GS	Personal Money Management	3
PSYC 2860	Abnormal Psychology	3	PSY 231GS	Abnormal Behavior and Society	3
PHED 1050	Physical Education-Walking and Jogging	3	PE 110GS	Basic Sports	3
PHED 1400	Personal Health	3	PE 150GS	Healthy, Wealthy and Wise	3
Need to reach 27 credit hour minimum in Distribution (Aesthetics, Humanities, Social Sciences, Natural Sciences, Analytical and Quantitative Thought and Wellness) - Pick 1 more credit					1
Capstone					
Transfer students must take this course at UNK					
BS Science-Related Course Requirements					8
CHEM 1090	General Chemistry	4	CHEM 160	General Chemistry	3

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CHEM 1070	General Chemistry	1	CHEM 160L	General Chemistry Laboratory	1
CHEM 1100	General Chemistry II	4	CHEM 161	General Chemistry	3
			CHEM 161L	General Chemistry Laboratory	1
Unrestricted Electives (these can be any kind of courses)					3
Physics Comprehensive Requirements					
PHYS 2120	General Physics II with Calculus	5	PHYS 276	General Physics II (Calculus)	4
			PHYS 276L	General Physics II (Calculus) Laboratory	1
Physics Comprehensive Math Requirements					13
MATH 2070	Analytic Geometry and Calculus 2	5	MATH 202	Calculus 2 with Analytic Geometry	5
MATH 2080	Analytic Geometry and Calculus 3	5	MATH 260	Calculus 3	5
MATH 2210	Differential Equations	3	MATH 305	Differential Equations	3