



Articulation Agreement

between

San Juan College

and

Navajo Technical University, Crownpoint, New Mexico

Purpose: The 2+2 articulation agreement between Navajo Technical University (NTU) San Juan College (SJC) determines equivalency of courses to be transferred. The agreement will help students transfer their courses seamlessly between the two institutions.

This agreement will be reviewed every three (3) years and is subject to change due to revisions in program curriculum.

Effective Date: November 4, 2019

Bachelor of Applied Science (B.A.S.) Degree in Advanced Manufacturing Technology

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL 1110	Composition I	3	
CS 101	Programming I	3				
MATH 1510	Calculus I	4	MATH 1510	Calculus I	4	31
ENGR 130	Engineering Graphics	3	N/A			
ENGR 123	Computer Skills for Engineering	3	N/A			
EE 101	Fundamentals of Electrical Engineering	3	N/A			
ENGR 103	Introduction to Engineering	3	ENGR 112	Introduction to Engineering	3	
ENGR 230	Advanced Engineering Graphics	3	N/A			
MATH 1220	College Algebra	4	MATH 1240	Pre-Calculus	4	
MATH 1230	Trigonometry	4	MATH 1230	Trigonometry	3	1 credit difference

ENGR 143	Characteristics of Engineering Materials	3	N/A			
AMT 210	Applied GD & T	3	N/A			
AMT 280	Computer Numerical Control Machine Tools	3	N/A			
IE 213	Structure and Properties of Materials	3	N/A			
IE 243	Strength of Materials	3	N/A			
CHEM 1217	General Chemistry I with Lab	4	CHEM 1215/CHEM 1215L	General Chemistry I for STEM Majors	4	
ENGL 1120	Composition II	3	ENGL 1120	Composition II	3	
IE 223	Design & Manufacturing Processes I	3	N/A			
ENGR 236	Inferential Engineering Statistics	3	N/A			
NAV 221	Navajo Government	3	N/A			
PHYS 1230	Algebra-Based Physics I Lecture & Lab	4	PHYS 1230/PHYS 1230L	Algebra-Based Physics	4	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HUMN 1180	History of American Indians in Media	3	N/A			
HST 211	American History 1877 to Present	3	HIST 1120	United States History II		

B.S. Degree in Animal Science

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL1110	Composition I	3	
ENGL1120	Composition II	3	ENGL 1120	Composition II	3	
CMP 101	Introduction to Computers	3	N/A		3	
MATH 1220	College Algebra	4	MATH 1220	College Algebra	3	1 credit difference
NAV 225	Diné Philosophy of Education	3	N/A			
	200-200		N/A			
ECON 1110	Survey of Economics	3	N/A			

CHEM 1217	General Chemistry I with Laboratory	4	CHEM 1215/1 CHEM 1215L	General Chemistry I for STEM Majors w/ Laboratory	4	
CHM 122	General Chemistry II	4	CHEM 1225/ CHEM1225L	General Chemistry II for STEM Majors w/ Laboratory	4	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HIST 1110	United States History I	3	HIST 1110	United States History II	3	
ASC 100	Introduction to Animal Science	3	N/A			
ASC-220	Comparative Anatomy of Animals	3	N/A			
ASC 210	Animal Science Career Development	1	N/A			
ASC 200	Animal Science Practicum	2	N/A			
BIOL 120	Principles of Biology I	4	BIOL 2110/ BIOL 2110L	Principles of Biology: Cellular & Molecular w/ Laboratory	4	
BIOL 122	Principles of Biology II	4	BIOL 2610/ BIOL 2610L	Principles of Biology: Biodiversity, Ecology and Evolution w/Lab	4	
BIO 226	Principles of Genetics	4	BIOL 2410/ BIOL 2410L	Principles of Biology: Genetics w/Lab	4	
BIOL 2310	Microbiology	4	BIOL 2310/ BIOL 2310L	Microbiology w/Lab	4	
ACG 212	Introduction to Finance	3	N/A			
ACG 210	Principles of Management	3	N/A		11/2	
MATH 1350	Introduction to Statistics	3	MATH 1350	Introduction to Statistics	4	
PHYS 1230	Algebra-Based Physics I Lecture & Lab	4	PHYS 1230/PHYS 1230L	Algebra-Based Physics	4	

B.S. Degree in Biology

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL1110	Composition I	3	
ENGL1120	Composition II	3	ENGL 1120	Composition II	3	
PSYC 1110	Introduction to Psychology	3	PYSC 1110	Introduction to Psychology	3	
PSYC 2120	Developmental Psychology	3	PSYC 2120	Developmental Psychology	3	

	Survey of			Survey of Physics		
PHYS 1115	Physics with Lab	4	PHYS 1115/ PHYS1115L	w/ Lab	4	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
CMP 101	Introduction to Computers	3	N/A		3	
HUMN 1180	History of American Indians in Media	3	N/A			
HIST 2150	History of American Southwest	3	N/A			
MATH 1220	College Algebra	4	MATH 1240	Pre-Calculus	3	
MATH 1230	Trigonometry	4	MATH 1230	Trigonometry	3	
NAV 225	Diné Philosophy of Education	3	N/A	N/A		
NAV 110	Foundations of Navajo Culture	3	ANTH 1330	Navajo Culture	3	
ECON 1110	Survey of Economics	3	N/A	N/A		
CHEM 1217	General Chemistry I with Laboratory	4	CHEM 1215/ CHEM1215L	General Chemistry I for STEM majors w/Lab	4	
CHM 122	General Chemistry II	4	CHEM 1225/ CHEM1225L	General Chemistry II for STEM majors w/ Lab	4	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HIST 1110	United States History I	3	HIST 1110	United States History I	3	
BIOL 263	General Botany & Lab	4	BIOL 2630/ BIOL 2630L	General Botany w/Lab	4	
BIOL 120	Principles of Biology I	4	BIOL 2110/ BIOL 2110L	Principles of Biology: Cellular & Molecular w/ Laboratory	4	
BIOL 122	Principles of Biology II	4	BIOL 2610/ BIOL 2610L	Principles of Biology: Biodiversity, Ecology and Evolution w/Lab	4	
BIO 226	Principles of Genetics	4	BIOL 2410/ BIOL 2410L	Principles of Biology: Genetics w/Lab	4	
BIOL 2310	Microbiology	4	BIOL 2310/ BIOL 2310L	Microbiology w/Lab	4	
CHM 286	Inorganic Chemistry with Lab	4	N/A			

BIOL 130	Human Anatomy &		BIOL 2210/ BIOL 2110L	Human Anatomy & Physiology I	4	
	Physiology I	4		w/Lab		
DIOL 225	Medical		N/A			
BIOL 225	Writing	4				
	Algebra-Based		PHYS	Algebra-Based	4	
PHYS 1230	Physics I		1230/PHYS	Physics		
	Lecture & Lab	4	1230L			

B.A. Degree in Business Administration

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL1110	Composition I	3	
ENGL1120	Composition II	3	ENGL 1120	Composition II	3	
PSYC 1110	Introduction to Psychology	3	PYSC 1110	Introduction to Psychology	3	
BIOL 1110	General Biology	4	BIOL 1110/ BIOL1110L	General Biology w/Lab	4	
ACG 101	Accounting Principles I	3	N/A	N/A		
CHEM 1120	Introduction to Chemistry	4	CHEM 1120/ CHEM 1120L	Introduction to Chemistry w/Lab	4	
NAV 110	Foundation of Navajo Culture	3				
CMP 101	Introduction to Computers	3				
COMM 2120	Interpersonal Communication	3	COMM 2120	Interpersonal Communication	3	
ACG 111	Accounting Principles II	3	N/A	N/A		
MATH 1220	College Algebra	4	MATH 1220	College Algebra	3	
MATH 1350	Introduction to Statistics	3	MATH 1350	Introduction to Statistics	4	
ECN 201	Principles of Microeconomics	3	ECON 2120	Microeconomics Principles	3	
Law 203	Business Law	3	N/A			
ACG 212	Introduction to Finance	3	N/A			
ACG 210	Principles of Management	3	N/A			
LAW 205	Professional Responsibility & Ethics	3	N/A			
ACG 225	Managerial Accounting	3	N/A			
ACG 216	Principles of Marketing		N/A			

B.F.A. Degree in Creative Writing

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL1110	Composition I	3	
ENGL1120	Composition II			1		
ENGL1120 ENGL 2120	or Intermediate		ENGL 1120	Composition II	_ = - 1	
ENGL 2120	Composition	3			3	
ENGL 150	Introduction to Literature		ENGL 1410	Introduction to Literature	3	
ENGL 2310	Introduction to Creative Writing	3	ENGL 2310	Introduction to Creative Writing	3	
ENGL 2560	Introduction Native American Literature		ENGL 2560	Introduction to Native American Literature	3	
ENGL 161	Comparative Ethnic Literature	3	N/A	N/A		
ENGL 2340	Introduction to Creative Nonfiction	3	ENGL 2340	Introduction to Creative Nonfiction	3	
ENGL 2567	Contemporary Navajo Literature	3	N/A			
IT 103	Creativity & Technology	3	N/A			
IT 111	Human Computer Interaction	3	N/A			
IT 160	Introduction to Digital Ethics	3	N/A			
IT 105	Introduction to Programming	3	N/A		3	
IT 110	Introduction to Digital Logic/ Hardware Programming	3	N/A			
CMP 101	Introduction to Computers	3	N/A		3	
MATH 1510	Calculus I	4	MATH 1510	Calculus I	4	
NAV 1110 or NAV 1130	Navajo I or Beginning Navajo reading & Writing	3	NAVA 1110 or NAVA 1130	Navajo I or Beginning Navajo reading & Writing	4/3	NAVA 1110 is 4 credits at SJC
IT 115	Drawing/Visual Culture	3	N/A			
IT 125	Introduction to Digital Video	3	N/A			
IT 142	Web Design Concepts	3	N/A			
IT 150	Introduction to System Administration	3	N/A			
IT 225	Digital Video II	3	N/A			
IT 275	Media Criticism	3	N/A			
IT 215	Motion Graphics	3	N/A			
IT 270	Web Standards	3	N/A			

IT 280	IT Project Management	3	N/A			
MATH 1220	College Algebra	4	MATH 1240	Pre-Calculus	4	
NAV 221	Navajo Government	3				
BIOL 1110	General Biology	4	BIOL 1110/ BIOL 1110L	General Biology w/Lab	4	
PHYS 1230	Algebra-Based Physics I Lecture & Lab	4	PHYS 1230/PHYS 1230L	Algebra-Based Physics	4	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HUMN 1180	History of American Indians in Media	3	N/A			
HST 211	American History 1877 to Present	3	HIST 1120	United States History II	3	

B.S. Degree in Early Childhood Multicultural Education

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL1110	Composition I	3	
MATH 1220	College Algebra	4	MATH 1220	College Algebra	3	1 credit difference
CMP 101	Introduction to Computers	3	N/A			
ECME 110	Child Growth Development and Learning	3	ECED 1110	Child Growth Development & Learning	3	
ECME 112	Health, Safety and Nutrition	3	ECED 1115	Health, Safety and Nutrition	3	
ECME 116	Family and Community Collaboration	3	ECED 1130	Family and Community Collaboration	3	
ECME 125	Introductory to Literacy and Reading Development	3	ECED 2115	Intro to Language, Literacy, and Reading	3	
ECM 210	Guiding Young Children	3	ECED 1120	Guiding of Young Children	3	
ECME 245	Professionalism	2	ECED 2110	Professionalism	2	
ECME 220	Curriculum Development & Implementation I	3	ECED 2120	Curriculum Development & Implementation I	3	
ECME 225	Curriculum Development & Implementation II	3	ECED 2130	Curriculum Development & Implementation II	3	
ECME 220A	Practicum I	2	EDUC 2998	Field Experience	3	1 credit difference
ECME 225A	Practicum II	2				

ECME 235	Assessment of Children & Evaluation of Programs	3	ECED 1125	Assessment of Children & Evaluation of Programs	3	
PYSC 1110	Introduction to Psychology	3	PYSC 1110	Introduction to Psychology	3	
PSYC 2120	Developmental Psychology	3	PSYC 2120	Developmental Psychology	3	
COM 150	Interpersonal Communication		COMM 2120	Interpersonal Communication	3	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HUMN 1180	History of American Indians in Media	3	N/A			
HST 211	American History 1877 to Present	3	HIST 1120	United States History II	3	

Bachelor of Science (B.S.) Degree in Electrical Engineering

	NTU Course	Credit	SJC Course #	SJC Course Title	Credit	Comments
NTU#	Title	Hours			Hours	
ENGL1110	Composition I	3	ENGL1110	Composition I	3	
CS 101	Programming I	3				
MATH 1510	Calculus I	4	MATH 1510	Calculus I	4	
ENGR 130	Engineering Graphics	3	N/A			
ENGR 123	Computer Skills for Engineering	3	N/A			
EE 101	Fundamentals of Electrical Engineering	3	N/A			
ENGR 103	Introduction to Engineering	3	ENGR 112	Introduction to Engineering	3	
ENGR 230	Advanced Engineering Graphics	3	N/A			
ENGR 169	Basic Statistics and Probability	3	MATH 1350	Introduction to Statistics	4	
ENGR 143	Characteristics of Engineering Materials	3	N/A			
MATH 1520	Calculus II	4	MATH 1520	Calculus II	4	
MATH 2530	Calculus III	4	MATH 2530	Calculus III	4	
MTH 410	Linear Algebra		MATH 2420	Applied Linear Algebra	3	
MTH 205	Discrete Mathematics	4	MATH 2430	Discrete Mathematics	3	1 credit difference
CHEM 1120	Introduction to Chemistry	4	CHEM 1120/1120L	Introduction to Chemistry	4	
ENGL 1120	Composition II	3	ENGL 1120	Composition II	3	
EE 102	DC Circuits & Systems	3	N/A			

EE 103	Digital &		N/A			
LL 103	Circuits Systems	3				
	General		CHEM	General Chemistry	4	
CHEM 1217	Chemistry I with		1215/CHEM	I with Laboratory		
	Laboratory	4	1215L			
NIA 37 110	Foundations of		ANTH 1330	Navajo Culture	3	
NAV 110	Navajo Culture	3				
NAV 211	Navajo History	3	N/A			
NIAW 221	Navajo		N/A			
NAV 221	Government	3				
	Algebra-Based		PHYS	Algebra-Based	4	
PHYS 1230	Physics I Lecture		1230/PHYS	Physics		1 1 1 1
	& Lab	4	1230L			
EE 201	AC Circuits &		N/A			
EE 201	Systems	3				
	Introduction to		N/A			
EE 207	Modeling &					
	Simulation					
EE 212	Instrumentation	3	N/A			
	History of		N/A			
HUMN 1180	American					The second
	Indians in Media	3				
	Differential			Applied		
MATH 2410	NEW YORK CONTROL OF THE WAY AND A STATE OF THE PARTY OF T		MATH 2410	Differential		
	Equations	4		Equations	4	

B.S. Degree in Environmental Science and Natural Resources

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL 1110	Composition I	3	ENGL 1110	Composition I	3	
ENGL 2120	Intermediate Composition	3	N/A			
CMP 101	Introduction to Computers	3	N/A			
GIT 105	Fundamentals of Cartography	3	N/A			
ENV 102	Environmental Science I with Lab	4	N/A			
ENV II	Environmental Science II with Lab	4	N/A			
MATH 1220	College Algebra	4	MATH 1220	College Algebra	3	1 credit difference
ENGR 234	Engineering Statistics	3	N/A			
			N/A			
ENGR 169	Basic Statistics and Probability	3	N/A			
MATH 1230	Trigonometry	4	MATH 1230	Trigonometry	3	1 credit difference

			N/A			
CHEM 1120	Introduction to Chemistry	4	CHEM 1120/ CHEM1120L	Introduction to Chemistry w/Lab	4	
NAV 225	Diné Philosophy of Education	3	N/A			
CHEM 1217	General Chemistry I with Laboratory	4	CHEM 1215/CHEM 1215L	General Chemistry I with Lab	4	
CHM 122	General Chemistry II	4	CHEM 1225/ CHEM 1225L	General Chemistry II w/Lab	4	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HUMN 1180	History of American Indians in Media	3	N/A			
HST 211	American History 1877 to Present	3	HIST 1120	United States History II	3	
BIOL 1110	General Biology	4	BIOL 1110/BIOL 1110L	General Biology	4	
ENV 216	Fundamental of Ecology with Lab	4	BIOL 2625/ BIOL 2625L	Introduction to Ecology w/Lab	4	
ENV 245	Natural Resources I	4	N/A			
ENV 289	Natural Resources II	4	N/A			
CHEM 2325	Environmental Chemistry	4	N/A			
ECON 1110	Survey of Economics	3	N/A			
GIT 110	Geographic Information Systems I	3	N/A			
GIT 111	Geographic Information Systems II	3	N/A			
GIT 202	Remote Sensing	4	N/A			
GIT 210	Service Learning Project	1	N/A			
GIT 220	Database Query	3	N/A			
ENV 225	Introduction to Hydrology with Lab	4	N/A			
CHM 286	Inorganic Chemistry with Lab	4	N/A			

B.S. Degree in Industrial Engineering

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL 1110	Composition I	3	
CS 101	Programming I	3				
MATH 1510	Calculus I	4	MATH 1510	Calculus I	4	
ENGR 130	Engineering Graphics	3	N/A			
ENGR 123	Computer Skills for Engineering	3	N/A			
EE 101	Fundamentals of Electrical Engineering	3	N/A			
ENGR 103	Introduction to Engineering	3	N/A			
ENGR 230	Advanced Engineering Graphics	3	N/A			
ENGR 169	Basic Statistics and Probability	3	MATH 1350	Introduction to Statics	4	
ENGR 143	Characteristics of Engineering Materials	3	N/A			
MATH 1520	Calculus II	4	MATH 1520	Calculus II	4	
CHEM 1120	Introduction to Chemistry with Lab	4	CHEM 1120/1120L	Introduction to Chemistry	4	
ENGL 1120	Composition II	3	ENGL 1120	Composition II	3	
IE 223	Design & Manufacturing Processes I	3	N/A			
ENGR 236	Inferential Engineering Statistics	3	N/A			
NAV 221	Navajo Government	3	N/A			
PHYS 1230	Algebra-Based Physics I Lecture & Lab	4	PHYS 1230/PHYS 1230L	Algebra-Based Physics	4	
IE 235	Lean Production	3	N/A			
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HUMN 1180	History of American Indians in Media	3	N/A			
MATH 2410	Differential Equations	4	MATH 2410	Applied Ordinary Differential Equations	4	
HST 211	American History 1877 to Present	3	HIST 1120	United States History II	3	

B.A.S. Degree in Information Technology

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL 1110	Composition I	3	
CS 101	Programming I	3	N/A			
	Introduction to		N/A			
CMP 101	Computers	3				
MATH 1510	Calculus I	4	MATH 1510	Calculus I	4	
TT 115	Drawing/Visual		N/A			
IT 115	Culture	3				
	Introduction to		N/A		15.7	
IT 125	Digital Video	3				
300	Web Design		N/A			
IT 142	Concepts	3	100			
	Introduction to		N/A			
	System		0.000			
IT 150	Administration	3				
IT 220	Database Design	3	N/A			
	Algorithms &		N/A			
IT 218	Data Structures	3	1 1 1			
	Algorithms &		N/A			
IT 218	Data Structures	3	1771			
	Computer		N/A			
IT 222	Security					
	IT Project		N/A			
IT 280	Management	3	14/11			
11 200	Computer		N/A			
IT 222	Security	3	14/71			
IT 260	Internetworking	3	N/A			
IT 270	Web Standards		N/A			
MATH 1220	College Algebra	4	MATH 1240	Pre-Calculus	4	
						1 credit
MATH 1230	Trigonometry	4	MATH 1230	Trigonometry	4	difference
	General		CHEM	General Chemistry	4	
CHEM 1217	Chemistry I with		1215/CHEM	I with Lab		
	Lab	4	1215L			
ENGL 1120	Composition II	3	ENGL 1120	Composition II	3	
N	Navajo		N/A			
NAV 221	Government	3				
	Algebra-Based		PHYS	Algebra-Based	4	
PHYS 1230	Physics I Lecture		1230/PHYS	Physics		
	& Lab	4	1230L			
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
	History of		N/A			
HUMN 1180	American					
	Indians in Media	3				
	American		HIST 1120	United States	3	
HST 211	History 1877 to			History II		
	Present	3				

B.A.S. Degree in New Media

NTU#	NTU Course Title	Credit Hours	SJC Course #	SJC Course Title	Credit Hours	Comments
ENGL1110	Composition I	3	ENGL 1110	Composition I	3	
ENGL 2120	Intermediate Composition		N/A			
PSYC 1110	Introduction to Psychology	3	PYSC 1110	Introduction to Psychology	3	
IT 105	Introduction to Programming	3	N/A		3	
IT 110	Introduction to Digital Logic/ Hardware Programming	3	N/A			
CMP 101	Introduction to Computers	3	N/A		3	
MATH 1510	Calculus I	4	MATH 1510	Calculus I	4	
IT 115	Drawing/Visual Culture	3	N/A			
IT 125	Introduction to Digital Video	3	N/A			
IT 142	Web Design Concepts	3	N/A		3	
IT 150	Introduction to System Administration	3	N/A			
IT 225	Digital Video II	3	N/A			
IT 275	Media Criticism	3	N/A			
IT 215	Motion Graphics	3	N/A			
IT 220	Database Design	3	N/A		3	
IT 280	IT Project Management	3	N/A			
MATH 1220	College Algebra	4	MATH 1240	Pre-Calculus	4	
MATH 1230	Trigonometry	4	MATH 1230	Trigonometry	3	1 credit difference
NAV 221	Navajo Government	3	N/A			
PHYS 1230	Algebra-Based Physics I Lecture & Lab	4	PHYS 1230/PHYS 1230L	Algebra-Based Physics	4	
COMM 1130	Public Speaking	3	COMM 1130	Public Speaking	3	
HUMN 1180	History of American Indians in Media	3				
HST 211	American History 1877 to Present	3	HIST 1120	United States History II	3	

Approved: .

Sandra Appin, Associate Vice President for Learning, San Juan College

12-4-19 Date

Dr. Casmir I. Agbaraji, Dean of Undergraduate Studies, Navajo Technical University

11/4/2019

Date