Associate of Science

The associate of science degree from JCCC

- requires a minimum of 64 college-level credit hours with a 2.0 or higher GPA.
- requires the completion of a cultural diversity course from a list of approved courses. Some courses in the approved list will also meet humanities, social science or non-lab science requirements for this degree.

The credit hours necessary to complete the associate of science degree include the following general education requirements plus 30 additional credit hours:

General Education Area		Credit Hours
Communications Associate of Scien	nce	9
These courses fulfill the communications requirements. A. Communications	ation skills requirements for the Associate of Science (AS) degree. Please refer to your specific degree for a l	ist of all
ENGL 121	Composition I*	3
B. Communications Elective	Composition	J
Select two of the following:		6
ENGL 122	Composition II*	
ENGL 123	Technical Writing I*	
ENGL 140	Writing for Interactive Media*	
BUS 150	Business Communications*	
SPD 120	Interpersonal Communication	
SPD 121	Public Speaking	
SPD 125	Personal Communication	
SPD 180	Intercultural Communication (Also meets Cultural Diversity Requirement)	
Total Hours		9
Humanities Associate of Science		6
requirements. Two courses from any of the followard of t	owing categories may count toward the six required hours.	
ENGL 130	Introduction to Literature*	3
ENGL 215	U.S. Latino and Latina Literature* (Also meets Cultural Diversity Requirement)	3
ENGL 217	Literature by Women* (Also meets Cultural Diversity Requirement)	3
ENGL 227	Introduction to Poetry*	3
ENGL 230	Introduction to Fiction*	3
ENGL 231	American Prose*	3
ENGL 235	Drama as Literature*	3
ENGL 250	World Masterpieces*	3
ENGL 254	Masterpieces of the Cinema*	3
ENGL 256	American Poetry*	3
THEA 120	Introduction to Theater	3
B. Foreign Language		
FL 178	Intermediate Russian I*	3
FL 179	Intermediate Russian II*	3
FL 182	Intermediate Japanese I*	5
FL 192	Intermediate Chinese I*	3
FL 193	Intermediate Chinese II*	3
FL 195	Intermediate Arabic I*	3
FL 220	Intermediate German I*	3

FL 221	Intermediate German II*	3
FL 230	Intermediate Spanish I*	3
FL 231	Intermediate Spanish II*	3
FL 240	Intermediate French I*	3
FL 241	Intermediate French II*	3
C. History		
HIST 125	Western Civilization: Readings and Discussion I	3
HIST 126	Western Civilization: Readings and Discussion II	3
HIST 128	Medieval History	3
HIST 129	Early Modern Europe 1500-1789	3
HIST 130	European History Since 1789	3
HIST 135	Eastern Civilization (Also meets Cultural Diversity Requirement)	3
HIST 137	African American Studies (Also meets Cultural Diversity Requirement)	3
HIST 140	U.S. History to 1877	3
HIST 141	U.S. History Since 1877	3
HIST 151	World History I: Traditional World (Also meets Cultural Diversity Requirement)	3
HIST 152	World History II: Modern World (Also meets Cultural Diversity Requirement)	3
HIST 160	Modern Russian History (Also meets Cultural Diversity Requirement)	3
HIST 162	Modern Latin America (Also meets Cultural Diversity Requirement)	3
D. Humanities		
ARTH 180	Art History: Ancient to Renaissance	3
ARTH 182	Art History: Renaissance to Modern	3
ARTH 184	Art History: Twentieth Century	3
ARTH 188	History of Photography	3
HUM 122	Introduction to Humanities	3
HUM 145	Introduction to World Humanities I (Also meets Cultural Diversity Requirement)	3
HUM 146	Introduction to World Humanities II (Also meets Cultural Diversity Requirement)	3
HUM 155	Classical Mythology	3
HUM 156	Contemporary Approaches to World Mythology	3
HUM 167	Introduction to Japanese Culture (Also meets Cultural Diversity Requirement)	3
JOUR 120	Mass Media and Society	3
MUS 121	Introduction to Music Listening	3
MUS 125	Introduction to Jazz Listening	3
MUS 126	Introduction to World Music (Also meets Cultural Diversity Requirement)	3
REL 120	Exploring World Religions (Also meets Cultural Diversity Requirement)	3
REL 125	Religions of the East (Also meets Cultural Diversity Requirement)	3
REL 126	Religions of the West (Also meets Cultural Diversity Requirement)	3
E. Philosophy		
PHIL 121	Introduction to Philosophy	3
PHIL 124	Logic and Critical Thinking	3
PHIL 143	Ethics	3
PHIL 154	History of Ancient Philosophy	3
PHIL 176	Philosophy of Religion	3
Total Program Hours	. ,	6
•		
Social Science/Economics Asso	ociate of Science	6

Social Science/Economics Associate of Science

These courses fulfill the social science/economics requirements for the Associate of Science (AS) degree. Please refer to your specific degree for a list of all requirements.

Two courses from any of the following categories may count toward the six required hours.

A. Anthropology

ANTH 125	Cultural Anthropology (Also meets Cultural Diversity Requirement)	3
ANTH 126	Physical Anthropology	3
ANTH 130	World Cultures (Also meets Cultural Diversity Requirement)	3

ANTHAAA	World Darking and Alexander Only and Disperity Demoise and On	0
ANTH 142	World Prehistory (Also meets Cultural Diversity Requirement)	3
B. Economics	Current of Footnamics	2
ECON 132	Survey of Economics Economics I	3
ECON 230 ECON 231	Economics II	3
	ECONOMICS II	3
C. Political Science POLS 122	Dolitical Science	2
POLS 124	Political Science American National Government	3
POLS 124 POLS 126		3
POLS 132	State and Local Government	3
POLS 132 POLS 135	Introduction to Comparative Government (Also meets Cultural Diversity Requirement)	3
	International Relations (Also meets Cultural Diversity Requirement)	3
D. Psychology	Applied Developer	0
PSYC 121	Applied Psychology	3
PSYC 130	Introduction to Psychology	3
E. Sociology	Later dead for the One follows (Alley are also Only and Discount's Description and	0
SOC 122	Introduction to Sociology (Also meets Cultural Diversity Requirement)	3
SOC 125	Social Problems (Also meets Cultural Diversity Requirement)	3
SOC 131	Sociology of Families	3
F. Gender and Ethnic Studies	Olah al Marana la Otadina (Alan arana la Oultura I Diagna la Para la P	0
WGS 201	Global Women's Studies (Also meets Cultural Diversity Requirement)	3
Total Program Hours		6
Science and Mathematics Associate	e of Science	12
	d mathematics requirements for the Associate of Science (AS) degree. Please refer to your specific degree	
of all requirements.		0 101 W 1101
•	in mathematics and at least one in a lab science.	
A. Mathematics		
A. Mathematics MATH 116		
	Geometry*	3
MATH 116	Geometry* Business Mathematics*	3
MATH 116 MATH 118		
MATH 116 MATH 118 MATH 120		3
MATH 116 MATH 118 MATH 120 MATH 122	Business Mathematics*	3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130	Business Mathematics* Technical Mathematics I*	3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131	Business Mathematics* Technical Mathematics I* Technical Mathematics II*	3 3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics*	3 3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra*	3 3 3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry*	3 3 3 3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus*	3 3 3 3 3 3 5
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 173	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications*	3 3 3 3 3 3 5 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 173 MATH 175 MATH 181	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics*	3 3 3 3 3 3 5 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 181 MATH 181	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool*	3 3 3 3 3 3 5 3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 175 MATH 181 MATH 225 MATH 231	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus I*	3 3 3 3 3 5 3 3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 175 MATH 181 MATH 225 MATH 231 MATH 231	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus II* Business and Applied Calculus II*	3 3 3 3 3 5 3 3 3 3 3
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241	Business Mathematics* Technical Mathematics II* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus II* Business and Applied Calculus II*	3 3 3 3 3 5 3 3 3 3 3 3 5
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241 MATH 242	Business Mathematics* Technical Mathematics II* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus II* Business and Applied Calculus II* Calculus II*	3 3 3 3 3 5 3 3 3 3 3 5 5
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241 MATH 242 MATH 243	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus I* Business and Applied Calculus II* Calculus II* Calculus III*	3 3 3 3 3 5 3 3 3 5 5 5 5
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241 MATH 242 MATH 243 MATH 243	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus I* Business and Applied Calculus II* Calculus II* Calculus III*	3 3 3 3 3 5 3 3 3 5 5 5 5
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241 MATH 244 MATH 243 MATH 243 MATH 254 A. Science	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus I* Business and Applied Calculus II* Calculus II* Calculus III*	3 3 3 3 3 5 3 3 3 5 5 5 5
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 175 MATH 225 MATH 231 MATH 231 MATH 241 MATH 242 MATH 243 MATH 243 MATH 254 A. Science (Life Science)	Business Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus II* Calculus II* Calculus II* Calculus III* Calculus III* Differential Equations*	3 3 3 3 3 5 3 3 3 5 5 5 4
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241 MATH 242 MATH 243 MATH 243 MATH 254 A. Science (Life Science) BIOL 121	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus I* Business and Applied Calculus II* Calculus II* Calculus III* Differential Equations*	3 3 3 3 3 3 5 3 3 3 5 5 5 4
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241 MATH 242 MATH 244 MATH 254 A. Science (Life Science) BIOL 121 BIOL 124 BIOL 125	Business Mathematics* Technical Mathematics I* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus I* Business and Applied Calculus II* Calculus II* Calculus III* Differential Equations*	3 3 3 3 3 3 3 3 3 3 5 5 5 5 4
MATH 116 MATH 118 MATH 120 MATH 122 MATH 130 MATH 131 MATH 165 MATH 171 MATH 172 MATH 173 MATH 175 MATH 175 MATH 181 MATH 225 MATH 231 MATH 232 MATH 241 MATH 242 MATH 243 MATH 243 MATH 254 A. Science (Life Science) BIOL 121 BIOL 124	Business Mathematics* Technical Mathematics II* Technical Mathematics II* Finite Mathematics* College Algebra* Trigonometry* Precalculus* Discrete Mathematics and its Applications* Statistics* Mathematics as a Decision Making Tool* Business and Applied Calculus II* Business and Applied Calculus II* Calculus II* Calculus III* Differential Equations* Introductory Biology for Non-Majors Oceanus: Essentials of Oceanography	3 3 3 3 3 3 3 3 3 3 5 5 5 5 5 4

BIOL 131	Environmental Science Lab*	1
BIOL 134	Principles of Sustainability	3
BIOL 135	Principles of Cell and Molecular Biology	4
BIOL 140	Human Anatomy	4
BIOL 144	Human Anatomy and Physiology	5
BIOL 150	Biology of Organisms*	5
BIOL 225	Human Physiology*	4
BIOL 230	Microbiology*	3
BIOL 231	Microbiology Lab*	2
(Physical Science)		
ASTR 120	Fundamentals of Astronomy	3
ASTR 122	Astronomy	4
CHEM 120	Chemistry in Society	4
CHEM 122	Principles of Chemistry	5
CHEM 124	General Chemistry I Lecture*	4
CHEM 125	General Chemistry I Lab	1
CHEM 131	General Chemistry II Lecture*	4
CHEM 132	General Chemistry II Lab*	1
CHEM 140	Principles of Organic & Biological Chemistry*	5
GEOS 130	General Geology	5
GEOS 140	Physical Geography	3
GEOS 141	Physical Geography Lab*	2
GEOS 145	World Regional Geography (Also meets Cultural Diversity Requirement)	3
PHYS 130	General Physics I*	5
PHYS 131	General Physics II*	5
PHYS 220	Engineering Physics I*	5
PHYS 221	Engineering Physics II*	5
PSCI 120	Physical Science	4
Total Program Hours		12
Health and/or Physical Education	n Associate of Science	1
These courses fulfill the health a	ind/or physical education requirements for the Associate of Science (AS) degree. Please refer to your	specific degree

These courses fulfill the health and/or physical education requirements for the Associate of Science (AS) degree. Please refer to your specific degree for a list of all requirements.

Health and/or Physical Education

HPER	Any Activity Course/Lifetime Fitness	1
BIOL 132	Introduction to Public Health	3
EMS 121	CPR I - Basic Life Support for Healthcare Provider	1
HMEC 151	Nutrition and Meal Planning	3
HPER 192	Wellness for Life	1
HPER 200	First Aid and CPR	2
HPER 202	Personal Community Health	3
HPER 205		2
HPER 255	Introduction to Physical Education	3
Total Program Hours		1

NOTE: The following HPER courses do NOT meet the general education requirement for Health and/or Physical Education--

HPER 174	Coaching and Officiating of Track and Field	2
HPER 195	Introduction to Sports Medicine	3
HPER 198	Athletic Training Practicum I	1
HPER 204	Care and Prevention of Athletic Injury	3
HPER 207	Athletic Training Practicum 2*	2
HPER 208	Introduction to Exercise Physiology	3
HPER 217		2

HPER 220	Sports Officiating	3
HPER 224	Outdoor Recreation	3
HPER 245	Elementary Physical Education	3
Cultural Diversity Courses Associat	e of Science	1 course
These courses fulfill the cultural dive	ersity requirements for the Associate of Science (AS) degree. Please refer to your specific degree for a list	of all
requirements.		
Cultural Diversity Courses		
ADMJ 223	The World of Crime*	3
ANTH 125	Cultural Anthropology (Also meets a General Education requirement)	3
ANTH 130	World Cultures (Also meets a General Education requirement)	3
ANTH 134	Native Americans	3
ANTH 135	American Indian Artistic Tradition	3
ANTH 142	World Prehistory (Also meets a General Education requirement)	3
ANTH 150	People and Cultures of Mesoamerica	3
ARTH 186	Art History: Introduction to Asian Art	3
BIOL 132	Introduction to Public Health	3
BUS 235	Introduction to International Business	3
ENGL 215	U.S. Latino and Latina Literature* (Also meets a General Education requirement)	3
ENGL 217	Literature by Women* (Also meets a General Education requirement)	3
ENGL 244	Literature of American Popular Music*	3
FL 111	Ancient Greek Readings and Grammar*	5
FL 145	Field Study in Russian Language & Culture	2
GEOS 145	World Regional Geography	3
HC 125	International Awareness Field Study	2
HIST 135	Eastern Civilization (Also meets a General Education requirement)	3
HIST 137	African American Studies (Also meets a General Education requirement)	3
HIST 150	Islam: Religion & Civilization	3
HIST 151	World History I: Traditional World (Also meets a General Education requirement)	3
HIST 152	World History II: Modern World (Also meets a General Education requirement)	3
HIST 160	Modern Russian History (Also meets a General Education requirement)	3
HIST 162	Modern Latin America (Also meets a General Education requirement)	3
HIST 167	Introduction to History: Japan	3
HIST 195	History of the Middle East	3
HUM 137	Introduction to Russian Culture	3
HUM 145	Introduction to World Humanities I (Also meets a General Education requirement)	3
HUM 146	Introduction to World Humanities II (Also meets a General Education requirement)	3
HUM 150	Islam: Religion & Civilization	3
HUM 156	Contemporary Approaches to World Mythology	3
HUM 167	Introduction to Japanese Culture (Also meets a General Education requirement)	3
INTR 145	Introduction to the Deaf Community*	3
MUS 126	Introduction to World Music (Also meets a General Education requirement)	3
PHIL 142	History of Asian Philosophy	3
POLS 132	Introduction to Comparative Government	3
POLS 135	International Relations (Also meets a General Education requirement)	3
POLS 200	Model United Nations	3
PSYC 205		
	Human Sexuality* Social Psychology*	3
PSYC 220	Social Psychology* Exploring World Policions (Also mosts a Constal Education requirement)	
REL 120	Exploring World Religions (Also meets a General Education requirement)	3
REL 125	Religions of the East (Also meets a General Education requirement)	3
REL 126	Religions of the West (Also meets a General Education requirement)	3
REL 150	Islam: Religion & Civilization	3
SOC 122	Introduction to Sociology (Also meets a General Education requirement)	3

6 Associate of Science

SOC 125	Social Problems (Also meets a General Education requirement)	3
SOC 146	Introduction to Social Work and Social Welfare	3
SOC 165	Chinese Society: Past and Present	3
SOC 200	Intercultural Applications*	3
SPD 180	Intercultural Communication (Also meets a General Education requirement)	3
WGS 201	Global Women's Studies (Also meets a General Education requirement)	3
WGS 220	The Many Women of Islam	3
Total Hours:		34