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ASSOCIATE IN SCIENCE

Minimum credits:	60
Minimum cumulative GPA:	2.0
Minimum grade in all courses:	2.0
Minimum JCC credits:	12

NOTE: Only courses with a 2.0 or better transfer to most four-year colleges and universities. To complete the MACRAO Articulation Agreement, students need to plan their courses carefully. Completion of the associate in science degree does NOT guarantee the MACRAO designation.

This degree is designed for students who plan to transfer to a four-year college or university to pursue a bachelor's degree. It is selected by students planning to pursue a career in engineering, medicine health sciences and other science-related professions.

GENERAL EDUCATION REQUIREMENTS (18 credits)

ENGLISH — (3 credits)

ENG 131 Writing Experience	3
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MATHEMATICS — (4 credits)

Choose one of the following:

MTH 140 Precalculus	5
MTH 151 Analytic Geometry and Calculus I	4

SCIENCE — (4 credits)

Choose one of the following:

BIO 131 General Biology	4
BIO 132 Human Biology	4
BIO 151 General Botany	4
BIO 152 General Zoology	4
BIO 155 Human Anatomy	5
CEM 121 Chemistry of Life	4
CEM 131 Fundamentals of Chemistry	4
CEM 132 Fundamentals of Organic & Biological Chemistry ...	4
CEM 141 General Chemistry I	5
CEM 142 General Chemistry II	5
GEL 160 Introduction to Geology	4
NSC 131 Contemporary Science	4
PHY 131 Conceptual Physics	4
PHY 151 Astronomy	4
PHY 231 College Physics I	4
PHY 251 Modern University Physics I	5

SOCIAL SCIENCE— (3 credits)

Choose one of the following:

ANT 131 Cultural Anthropology	3
CRJ 101 Criminal Law	3
CRJ 104 Criminal Justice Psychology	3
CRJ 111 Introduction to Criminal Justice	3
CRJ 120 Human Relations for Corrections	3
CRJ 127 Corrections Law	3
ECN 231 Macroeconomics	3
ECN 232 Microeconomics	3
GEO 131 Physical Geography	3
HIS 120 Ancient History	3
HIS 131 Western Civilization to 1555	4
HIS 132 Western Civilization, 1555 to Present	4
HIS 231 Dev. of the U.S. through the Civil War	3
HIS 232 Dev. of the U.S. from the Civil War	3
PLS 141 American National Government	3
PSY 140 Introduction to Psychology	4
PSY 152 Social Psychology	3
PSY 251 Abnormal Psychology	3
PSY 252 Developmental Psychology	3
SOC 152 Social Psychology	3
SOC 231 Principles of Sociology	3
SOC 236* Women in a Changing Society	3

HUMANITIES — (3 credits)

Choose one of the following:

ART 111 Art History: Prehistoric - 1400	3
ART 112 Art History: Renaissance - Present	3
ENG 210 Introduction to Film	3
ENG 236* Women in a Changing Society	3
ENG 246 Short Story & Novel	3
ENG 247 Poetry and Drama	3
ENG 249 African American Literature	3
ENG 252 Shakespeare	3
ENG 254 Children's Literature	3
ENG 255 American Literature 19th Century	3
ENG 256 American Literature 20th Century	3
ENG 257 World Literature I	3
HUM 131 Cultural Connections	3
MUS 130 Survey of Non-Western Music	3
MUS 131 Understanding Music	3
MUS 132 History of American Popular Music	3
MUS 133 Music Education	3



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(cont'd.)

MUS 151 Music Theory I	4
MUS 152 Music Theory II	4
PHL 231 Introduction to Philosophy	3
PHL 232 Logic	3
THR 116 Introduction to Theatre	3

PHY 151 Astronomy	4
PHY 231 College Physics I	4
PHY 232 College Physics II	4
PHY 251 Modern University Physics I	5
PHY 252 Modern University Physics II	5

**Cannot be double-counted: prefix chosen at registration cannot be changed.*

Courses cannot be counted towards both general education and additional degree requirements.

HEALTH AND FITNESS — (1 credit)

Choose one of the following:

HPF 160 Wellness	1
HPF 168 Weight Training & Conditioning	2
HPF 221 Jazz Techniques	3
HPF 268 Advanced Weight Training	2
HPF 277 Stress Management	2

PROGRAM REQUIREMENTS

Additional courses** so that total degree equals 60 credits: Plan to visit an academic advisor to obtain a guidesheet and/or to discuss requirements for your selected program of study. Students are encouraged to choose courses that transfer as equivalent credit to four-year colleges and universities. Students are responsible to see that courses taken meet the requirements for their chosen program of study.

ADDITIONAL DEGREE REQUIREMENTS (19 Credits)

WRITTEN AND ORAL COMMUNICATION — (3 credits)

ENG 132 Writing Experience	3
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NATURAL SCIENCE — (16 credits)

(At least one course must be from different discipline than taken in general education.)

BIO 131 General Biology	4
BIO 132 Human Biology	4
BIO 151 General Botany	4
BIO 152 General Zoology	4
BIO 155 Human Anatomy and Physiology	5
BIO 220 Microbiology	4
CEM 121 Chemistry of Life	4
CEM 131 Fundamentals of Chemistry	4
CEM 132 Fundamentals of Organic & Biological Chemistry	4
CEM 141 General Chemistry I	5
CEM 142 General Chemistry II	5
CEM 241 Organic Chemistry	5
CEM 242 Organic Chemistry	5
GEL 160 Introduction to Geology	4
MTH 151 Calculus I	4
MTH 154 Calculus II	5
MTH 251 Calculus III	4
MTH 254 Differential Equations	4
PHY 131 Conceptual Physics	4

***Additional courses exclude continuing education courses (prefix CED, CEU, CFO, CJT, CSS, ESL), classes offered through JCC's workforce training programs (prefixes JTI, PDI), and ENG 080, 085, 090, 101, 102, 109, 110, and MTH 090, 095, 100, 110, 120.*