



MODESTO JUNIOR COLLEGE CATALOG ADDENDUM 2015-2016

YOSEMITE COMMUNITY COLLEGE DISTRICT

435 College Avenue
Modesto, California 95350
www.mjc.edu

ACCREDITED BY:

The Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges
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ACCJC/WASC is an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

The Modesto Junior College Catalog is published annually by the Modesto Junior College Office of Instruction.

C-ID TABLE

C-ID #	Title	MJC Course ID
ACCT 110	Financial Accounting	BUSAD 201
ACCT 120	Managerial Accounting	BUSAD 202
AG-AB 108	Agricultural Computer Applications	AGEC 225
AG-AP 128L	Introduction to Soil Sciences	NR 200
AJ 110	Introduction to Criminal Justice.....	ADJU 201
AJ 120	Concepts of Criminal Law	ADJU 203
AJ 122	Criminal Court Process.....	ADJU 202
AJ 124	Legal Aspects of Evidence.....	ADJU 204
AJ 140	Criminal Investigation	ADJU 212
AJ 200	Introduction to Corrections.....	ADJU 235
AJ 220	Juvenile Procedures	ADJU 232
ANTH 110	Introduction to Biological Anthropology	ANTHR 101
ANTH 120	Introduction to Cultural Anthropology	ANTHR 102
ANTH 130	Introduction to Linguistic Anthropology.....	ANTHR 104
ANTH 150	Introduction to Archeology	ANTHR 130
ARTH 110	Survey of Western Art from Prehistory through the Middle Ages	ART 164
ARTH 120	Survey of Western Art from Renaissance to Contemporary.....	ART 165
ARTH 130	Survey of Asian Art.....	ART 169
ARTH 150	Survey of Modern Art	ART 163
ARTS 100	2-D Foundations.....	ART 124
ARTS 101	3-D Foundations.....	ART 125
ARTS 110	Fundamentals of Drawing.....	ART 120
ARTS 200	Figure Drawing.....	ART 123
ARTS 205	Intermediate Drawing	ART 121
ARTS 210	Introduction to Painting	ART 147 or 148
BIOL 190	Cell and Molecular Biology.....	BIO 101 (4) or (5)
BUS 110	Introduction to Business.....	BUSAD 248
BUS 115	Business Communication	BUSAD 210
BUS 125	Business Law.....	BUSAD 218
CLDEV 100	Child Growth and Development	CLDDV 103
CLDEV 110	Child, Family and Community.....	CLDDV 109
CHEM 100	Chemistry and Society.....	CHEM 150
CHEM 101	Introduction to Chemistry	CHEM 143 (4) or (5)
CHEM 102	Introduction to Organic and Bio Chemistry.....	CHEM 144
CHEM 110	General Chemistry for Science Majors I, with Lab	CHEM 101
CHEM 120S	General Chemistry Sequence.....	CHEM 101 + CHEM 102
CHEM 140	Survey of Chemistry and Physics	PHSCI 180
CHEM 150	Organic Chemistry for Science Majors I, w/lab.....	CHEM 112 or CHEM 122
CHEM 160S	Organic Chemistry for Science Majors II, Seq A.....	CHEM 112 & CHEM 113
CHEM 160S	Organic Chemistry for Science Majors II, Seq A.....	CHEM 122 & CHEM 123
COMM 110	Public Speaking.....	COMM 100 (formerly listed as SPCOM 100)
COMM 120	Argumentation or Argumentation and Debate.....	COMM 104 (formerly listed as SPCOM 104)
COMM 120	Argumentation or Argumentation and Debate.....	COMM 107 (formerly listed as SPCOM 107)
COMM 130	Interpersonal Communication.....	COMM 103 (formerly listed as SPCOM 103)
COMM 140	Small Group Communication.....	COMM 106 (formerly listed as SPCOM 106)
COMM 150	Intercultural Communication	COMM 130 (formerly listed as SPCOM 130)
COMM 160B	Forensics (Speech and Debate).....	COMM 105 (formerly listed as SPCOM 105)
COMM 170	Oral Interpretation of Literature	COMM 120 (formerly listed as SPCOM 120)
COMM 190	Introduction to Persuasion	COMM 110 (formerly listed as SPCOM 110)
COMP 122	Programming Concepts and Methodology I	CSCI 271 (formerly listed as CMPSC 205)
COMP 132	Programming Concepts and Methodologies II	CSCI 272 (formerly listed as CMPSC 261)
COMP 142	Computer Architecture and Organization	CSCI 273 (formerly listed as CMPSC 241)
COMP 152	Discrete Structures	CSCI 204 (formerly listed as CMPSC 219)
ECE 120	Principle and Practices of Teaching Young Children	CLDDV 101
ECE 130	Introduction to Curriculum.....	CLDDV 107
ECE 200	Observation and Assessment	CLDDV 167
ECE 210	Practicum in Early Childhood Education	CLDDV 127 or CLDDV 128
ECE 220	Health, Safety and Nutrition	CLDDV 111
ECE 230	Teaching in a Diverse Society.....	CLDDV 262

C-ID TABLE CONTINUED

C-ID #	Title.....	MJC Course ID
ECON 201	Principles of Microeconomics	ECON 102
ECON 202	Principles of Macroeconomics	ECON 101
EDUC 200	Intro to Elementary Classroom Teaching.....	SOCSC 110
ENGL 100	College Composition.....	ENGL 101
ENGL 105	Argument, Writing and Critical Thinking	ENGL 103
ENGL 120	Introduction to Literature.....	ENGL 102
ENGL 130	Survey of American Literature 1	ENGL 135
ENGL 135	Survey of American Literature 2	ENGL 136
ENGL 140	Survey of World Literature 1.....	ENGL 131
ENGL 145	Survey of World Literature 2.....	ENGL 132
ENGL 160	Survey of British Literature 1	ENGL 137
ENGL 165	Survey of British Literature 2.....	ENGL 138
ENGL 180	Children's Literature	ENGL 169
GEOG 110	Introduction to Physical Geography	GEOG 101
GEOG 120	Introduction to Human Geography.....	GEOG 102
GEOG 125	World Regional Geography.....	GEOG 110
GEOG 140	California Geography.....	GEOG 104
GEOG 155	Intro to Geographic Info Systems and Techniques, with Lab.....	GEOG 109
GEOL 100	Physical Geology.....	GEOL 160
GEOL 101	Physical Geology with Lab	GEOL 161
GEOL 111	Historical Geology with Lab	GEOL 166
GEOL 121	Earth Science with Lab	EASCI 161
GEOL 200	Geology of California	GEOL 165
HIST 130	United States History from 1877.....	HIST 101
HIST 140	United States History from 1865.....	HIST 102
HIST 160	World Civilization from the 16th Century.....	HIST 107
HIST 170	Western Civilization I.....	HIST 104
HIST 180	Western Civilization II.....	HIST 105
IT IS 120	Bus Inform Systems, Cmptr Inform Systems.....	CSCI 220 (formerly listed as CMPSC 202)
KIN 100	Introduction to Kinesiology	PE 124
KIN 101	First Aid and CPR.....	HE 101
MATH 210	Single Var. Calculus I Early Transcendentals.....	MATH 171
MATH 220	Single Var. Calculus II - Early Transcendentals	MATH 172
MATH 900S	Single Variable Calculus Sequence	MATH 171 and MATH 172
MATH 910S	Differential Equations and Linear Alg	MATH 174
MUS 100	Music Appreciation	MUSG 101
MUS 110	Music Fundamentals.....	MUST 101
MUS 120	Music Theory 1.....	MUST 121
MUS 125	Musicianship 1.....	MUST 131
MUS 130	Music Theory 2.....	MUST 122
MUS 135	Musicianship 2.....	MUST 132
MUS 140	Music Theory 3.....	MUST 123
MUS 145	Musicianship 3.....	MUST 133
MUS 150	Music Theory 4.....	MUST 124
MUS 155	Musicianship 4.....	MUST 134
MUS 160	Applied Music	MUSA 124 or MUSA 154 or MUSA 173 or MUSA 183
MUS 180	Large Ensemble	MUSE 145 or MUSE 155 or MUSA 156 or MUSE 165 or MUSE 175 or MUSE 181
NUTR 110	Introduction to Nutrition Science	FDNTR 219
PHIL 100	Introduction to Philosophy	PHILO 101
PHIL 120	Introduction to Ethics	PHILO 111
PHIL 130	History of Ancient Philosophy.....	PHILO 120
PHIL 140	History of Modern Philosophy	PHILO 121
PHIL 210	Symbolic Logic.....	CSCI 203/PHILO 103 (formerly listed as CMPSC 103)
PHYS 100S	Algebra/Trig Based Physics AB.....	PHYS 142, and PHYS 143 (4) or (5)
PHYS 105	Mechanics, Heat Wave	PHYS 142 (4) or (5)
PHYS 110	Algebra/Trig Based Physics B	PHYS 143 (4) or (5)
PHYS 140	Survey of Chemistry and Physics.....	PHSCI 180
PHYS 200S	Calculus-Based Physics for Scientists and Engineers: ABC.....	PHYS 101 and PHYS 102 and PHYS 103 (4) or (5)

C-ID TABLE CONTINUED

C-ID #	Title.....	MJC Course ID
PHYS 205	Calculus-Based Physics for Scientists and Engineers: A	PHYS 101 (4) or (5)
PHYS 210	Calculus-Based Physics for Scientists and Engineers: B	PHYS 103 (4) or (5)
POLS 110	Intro to American Government and Politics	POLSC 101
POLS 120	Introduction to Political Theory and Thought.....	POLSC 130
POLS 130	Introduction to Comparative Government and Politics	POLSC 140
POLS 140	Introduction to International Relations.....	POLSC 110
PSY 110	Introductory Psych.....	PSYCH 101
PSY 115	Psychology of Personal and Social Adjustment.....	PSYCH 130
PSY 120	Introduction to Abnormal Psychology	PSYCH 105
PSY 130	Introduction to Human Sexuality.....	PSYCH 110
PSY 150	Introduction to Biological Psychology.....	PSYCH 103/PHYSO 103
PSY 170	Introduction to Social Psychology.....	PSYCH 104
PSY 180	Introduction of Lifespan Psychology.....	PSYCH 141
PSY 200	Introduction to Research Methods.....	PSYCH 102
SOCI 110	Introduction to Sociology	SOCIO 101
SOCI 115	Social Problems	SOCIO 102
SOCI 125	Introduction to Statistics in Sociology.....	SOCIO 105
SOCI 130	Introduction to Marriage and Family	SOCIO 125
SOCI 150	Introduction to Race and Ethnicity.....	SOCIO 150
SPAN 100	Elementary Spanish 1	SPAN 101
SPAN 110	Elementary Spanish 2.....	SPAN 102
SPAN 220	Spanish for Spanish Speakers 1.....	SPAN 109
SPAN 230	Spanish for Spanish Speakers 2.....	SPAN 110
THTR 111	Introduction to Theatre.....	THETR 100
THTR 114	Script Analysis	THETR 114
THTR 151	Acting I.....	THETR 160
THTR 152	Acting II.....	THETR 161
THTR 171	Stagecraft.....	THETR 105
THTR 173	Intro. to Stage Lighting or Lighting Design Fund.	THETR 182
THTR 174	Intro. to Stage Costume or Fund. of Costume Design.....	THETR 175
THTR 175	Intro. to Stage Makeup or Stage Makeup.....	THETR 174
THTR 191	Rehearsal and Performance in Production	THETR 133 or 134 or 135 or 136 or 159
THTR 192	Technical Theatre in Production	THETR 190

Updated 9/9/15



INTRADISTRICT COURSE EQUIVALENCIES

Between Modesto Junior College and Columbia College



As members of the Yosemite Community College District, Columbia College and Modesto Junior College have established articulation agreements allowing students to use specific courses taken at either college to satisfy prerequisites and program requirements at either institution.

The below list represents the current course equivalencies at the time this web page was created. Evaluation of course equivalencies occurs throughout the year. If you are interested in learning whether another course taken at either institution is equivalent to a specific course, you should contact the MJC Evaluators at (209) 575-6033 or (209) 575-6040.

MJC	COLUMBIA	MJC	COLUMBIA	MJC	COLUMBIA	MJC	COLUMBIA
ANAT 125	BIOL 10	CLDDV 167	CHILD 4	Guidance Req. Satisfied at MJC	GUIDE 1	MUST 132	MUSIC 4B
ANAT 125 + PHYSO 101	BIOL 10 + BIOL 60	CLDDV 262	CHILD 36	Guidance Req. Satisfied at MJC	GUIDE 150	MUST 133	MUSIC 5A
ANTHR 101	ANTHR 1	CMPGR 215	CCTIS 137 formally CMPSC 11	GUIDE 110	GUIDE 107	MUST 134	MUSIC 5B
ANTHR 102	ANTHR 2	CMPGR 268	CCTDM 40 formally CMPSC 19	GUIDE 111	GUIDE 11	NR 215	FNR 81 formally NARTC 181
ANTHR 130	ANTHR 10	COLSK 100	GUIDE 18	GUIDE 112	GUIDE/BUSAD 25	NR 220	FNR 2 formally FORES 1
ANTHR 150	ANTHR 15	COMM 100	SPCOM 1	HE 101	HHP 62	NR 224	FNR 60 formally NARTC 160
AP 50	BIOL 150	COMM 102	SPCOM 4	HE 110	HHP 60	NR 376	FNR 10/FNR 62 formally FORES 10/FORTEC 162
ART 108	ART 31	COMM 104 or COMM 107	SPCOM 102	HE 111	HHP 2	NR 379	FNR 22 formally NATRE 22
ART 120	ART 1	COMM 105	SPCOM 7	HIST 101	HIST 16	OFADM 314	OFTEC 131
ART 123	ART 9A	COMM 106	SPCOM 9 or BUSAD 9	HIST 102	HIST 17	PE 108	HHP 4
ART 124	ART 2	COMM 120	DRAMA 20	HIST 106	HIST 13	PE 120	HHP 63
ART 125	ART 3	COMM 130	SPCOM 5	HIST 107	HIST 14	PE 124	HHP 3
ART 147 or 148	ART 21A	CSCI 220 formally CMPSC 202	CCTIS 10 formally CMPSC 1	HIST 116	HIST 21	PHILO 101	PHILO 1
ART 149	ART 21B	CSCI 221 formally CMPSC 213	CCTPG 48 formally CMPSC 28	HIST 129	HIST 11	PHILO 115	HUMAN 4
ART 164	ART 11	CSCI 223 formally CMPSC 278	CCTIS 30 formally CMPSC 30	HUMAN 105	HUMAN 1	PHILO 123	PHILO 25
ART 165	ART 12	CSCI 224 formally CMPSC 231	OFTEC 141	HUMAN 106	HUMAN 2	PHILO 135	PHILO 35
ART 169	ART 13	CSCI 230 formally CMPSC 275	CCTPG 51 formally CMPSC 55	HUMAN 110	HUMAN 3	PHSCI 180	CHEM 30 or PHYCS 30
ART 170	ART 40	CSCI 250 formally CMPGR 264	CCTDM 12 formally CMPSC 12	HUMSR 114	SOCIO 28	PHYS 101	PHYCS 5A
BIO 101	BIOL 2	CSCI 271 formally CMPSC 205	CCTPG 22 formally CMPSC 22	HUMSR 116	PSYCH 35	PHYS 103	PHYCS 5B
BIO 101 + BOT 101 + ZOOL 101	BIOL 2 + BIOL 4 + BIOL 6	CSCI 272 formally CMPSC 261	CCTPG 24 formally CMPSC 24	MATH 10	MATH 601	PHYS 142	PHYCS 4A
BIO 111	BIOL 17	EASCI 161	ESC 33	MATH 20	MATH 602	PHYS 143	PHYCS 4B
BIO 114	BIOL 24	EASCI 162	ESC 50	MATH 70	MATH 101	PHYS 142 + PHYS 143	PHYCS 4A + PHYCS 4B
BOT 101	BIOL 6	ECON 101	ECON 10	MATH 90	MATH 104	PHYS 160	PHYCS 1
BOT 101 + BIO 101 + ZOOL 101	BIOL 2 + BIOL 4 + BIOL 6	ECON 102	ECON 11	MATH 101	MATH 6	PHYSO 101	BIOL 60
BUSAD 201	BUSAD 2A	EMS 350	EMS 157	MATH 105	MATH 4	PHYSO 101 + ANAT 125	BIOL 60 + BIOL 10
BUSAD 202	BUSAD 2B	EMS 390	EMS 4	MATH 121	MATH 17A	POLSC 101	POLSC 10
BUSAD 218	BUSAD 18	ENGL 49	ENGL 650	MATH 122	MATH 17B	POLSC 110	POLSC 14
BUSAD 240	BUSAD 40	ENGL 50	ENGL 151	MATH 130	MATH 12	POLSC 140	POLSC 16
BUSAD 245	BUSAD 30	ENGL 101	ENGL 1A	MATH 134	MATH 2	PSYCH 101	PSYCH 1
BUSAD 248	BUSAD 20	ENGL 102	ENGL 1B	MATH 171	MATH 18A	PSYCH 102	PSYCH 15
CHEM 101	CHEM 2A & 2AL	ENGL 103	ENGL 1C	MATH 172	MATH 18B	PSYCH 105	PSYCH 24
CHEM 102	CHEM 2B & 2BL	ENGL 132	ENGL 81	MATH 173	MATH 18C	PSYCH 110	PSYCH 5
CHEM 101 + CHEM 102	CHEM 2A + 2AL + CHEM 2B + 2BL	ENGL 135	ENGL 17	MDAST 321	OFTEC 50	PSYCH 130	PSYCH 30
CHEM 112	CHEM 4A & 4AL	ENGL 136	ENGL 18	MICRO 101	BIOL 65	PSYCH 141	PSYCH 10
CHEM 113	CHEM 4B & 4BL	ENGL 137	ENGL 46	MUSA 121	MUSIC 31A	SOCIO 101	SOCIO 1
CHEM 112 + CHEM 113	CHEM 4A + 4AL + CHEM 4B + 4BL	ENGL 138	ENGL 47	MUSA 123	MUSIC 41A & 41B	SOCIO 102	SOCIO 2
CHEM 122	CHEM 4A + 4AL	ENGL 161	ENGL 11	MUSA 141	MUSIC 49	SOCIO 125	SOCIO 12
CHEM 122 + CHEM 123	CHEM 4A + 4AL + CHEM 4B + 4BL	ENGL 163	ENGL 50	MUSA 145	MUSIC 50	SOCIO 150	SOCIO 5
CHEM 143	CHEM 14 & 14L	FDNTR 219	BIOL 50	MUSA 151	MUSIC 36	SOCSC 58	GUIDE 115
CHEM 144	CHEM 16 & 16L	FSCI 301	FIRE 1	MUSA 152	MUSIC 37	SPAN 51	SPAN 10A
CHEM 150	CHEM 20	FSCI 302	FIRE 2	MUSA 153	MUSIC 39	SPAN 101	SPAN 1A
CLDDV 101	CHILD 3	FSCI 303	FIRE 3	MUSA 154	MUSIC 56	SPAN 102	SPAN 1B
CLDDV 103	CHILD 1	FSCI 304	FIRE 4	MUSA 183	MUSIC 52	SPAN 103	SPAN 2A
CLDDV 107	CHILD 35	FSCI 305	FIRE 5	MUSE 151	MUSIC 66	SPAN 104	SPAN 2B
CLDDV 109	CHILD 22	FSCI 337	FIRE 7	MUSE 161	MUSIC 76	STSK 78	GUIDE 100
CLDDV 111	CHILD 26	FSCI 362 & FSCI 363	FIRE 7, FIRE 50, FIRE 101, FIRE 106, FIRE 108, FIRE 110	MUSE 176	MUSIC 78	THETR 100	DRAMA 10
CLDDV 121	CHILD 23	FSCI 364	FIRE 29A & 29B	MUSG 101	MUSIC 2	THETR 120	DRAMA 20
CLDDV 125	CHILD 25	GEOG 101	GEOGR 15	MUSG 121	MUSIC 10	THETR 122	DRAMA 22
CLDDV 127	CHILD 16 or CHILD 116	GEOG 102	GEOGR 12	MUSG 122	MUSIC 11	THETR 160	DRAMA 42
CLDDV 128	CHILD 16	GEOG 109	GEOGR 60	MUST 121	MUSIC 20A	ZOOL 101	BIOL 4
CLDDV 150	CHILD 30	GEOL 161	ESC 5	MUST 122	MUSIC 20B	ZOOL 101 + BIO 101 + BOT 101	BIOL 2 + BIOL 4 + BIOL 6
CLDDV 151	CHILD 31	GEOL 166	ESC 23	MUST 123	MUSIC 21A		
CLDDV 154	CHILD 17	GEOL 171A, B	ESC 35	MUST 124	MUSIC 21B		
CLDDV 163	CHILD 19			MUST 131	MUSIC 4A		

Degrees, Certificates and Skills Recognitions Offered at MJC

<i>TITLE OF AWARD</i>	<i>AWARD TYPE</i>	<i>PG.</i>	<i>TITLE OF AWARD</i>	<i>AWARD TYPE</i>	<i>PG.</i>	<i>TITLE OF AWARD</i>	<i>AWARD TYPE</i>	<i>PG.</i>
Accounting	C AS	149	Computer Programming Specialist	C	179	Nursing, LVN to ADN	AS	211
Accounting Clerk	C	149	Computer Science	AA AS AST	179	Advanced Placement Pathway		
Administration of Justice	AS AST	150	Crop Science	AS	221	Office Administration	C AS	214
Adv. Heavy Eqmnt Technician	C	153	CSU-GE Transfer Pattern	C	187	Office Computer Applications	C	215
Agricultural Business	AS	151	Dairy Science	AS	156	Office Support	C	216
Agriculture-Sales, Service (C Technician)	C AS	152	Earth Science	UPE	180	Philosophy		AAT 216
Agricultural Science	AS UPE	155	Elementary Teacher Ed		AAT 228	Photography	AA	217
Animal Science	AS	156	Emergency Medical Technician (EMT)	SR	180	Physical Education	AA	218
Anthropology		AAT 159	English		AAT 181	Physics		AST 220
Art	AA	161	Environmental Horticultural Science	AS	182	Political Science		AAT 221
Art: History		AAT 159	Equine Science	C	158	Poultry Science	AS	157
Art: Studio Arts		AAT 160	Ethnic Studies	SR	184	Professional Selling	C	222
Artificial Insemination Technician	C	157	Fire Science	C AS	185	Psychology		AAT 222
Athletic Training/Sports Medicine	AS	161	Fire Science (Fire Academy)	SR	184	Psychosocial Rehabilitation	SR	223
Autobody/Collision Repair	C	162	Forestry	C AS	186	Real Estate (C: Real Estate Broker SR: Real Estate Salesperson)	SR C AS	224
Autobody/Engines & Transmissions	C	164	Fruit Science	AS	221	Recording Arts	SR	225
Autobody/Refinishing	SR AS	162	Geography		AAT 191	Records Management/Data-Entry	C	225
Automotive Brakes & Suspension	C	163	Geology		AST 192	Recreational Land Management	C AS	207
Automotive Diagnosis	C	164	Gerontology	SR	193	Respiratory Care	AS	226
Automotive Maintenance	C	164	Health and Physical Education		UPE 193	Retail Management (WAFC)	C	227
Automotive Service	C	165	Heavy Machinery Management	C	154	Social and Behavioral Sciences		GSE 191
Automotive Technician	C AS	163	History		AAT 194	Sociology		AAT 229
Basic Heavy Equipment Technician	C	154	Humanities		UPE 195 GSE 188	Soil Science	AS	208
Biological Sciences		UPE 165	Human Services	C AA	194	Spanish	AA	230
Bookkeeping	C AS	166	IGETC Transfer Pattern	C	187	Supervisory Management	C AS	230
Business Administration	AS AST	167	Industrial Electronics	C AS	196	Supervisory Mgmt in Public Safety	SR	151
Business Operations: Management	AS	168	International Business	C	197	Theatre	AA	232
Chemistry	UPE	169	Kinesiology		AAT 219	Theatre Arts		AAT 231
Chemical Dependency Counseling	AA	169	Landscape and Park Maintenance	C	183	Theatre: Design and Technical	SR	232
Child Development	AS	170	Landscape Design	C	183	Theatre: Performance	SR	233
Child Devt. Assoc. Teacher	C	171	Language and Rationality		GSE 189	Veterinary Technician	C	158
Child Devt. Teacher	C	172	Language Studies		UPE 197	Welding	AS	233
Child Devt. Master Teacher	C	171	Machine Tool Technology	AS	198	Welding: Design & Fabrication	SR	234
Child Devt. Site Supervisor	C	172	Machine Tool Technology 1	C	199	Welding: Gas Metal Arc Welding and Gas Tungsten Arc Welding	SR	234
Child Devt. Early Childhood Edu		AAT 170	Machine Tool Technology 2	C	199	Welding: Manufacturing Technology (Interdisciplinary)	C	
Child Devt. Early Interventionist	C	171	Maintenance Machinist 1	SR	200	Welding: Pipe Welding	SR	234
Clerical	C AS	173	Maintenance Machinist 2	C	200	Word Processing	C	235
CNC Operator	SR	199	Marketing	AS	201			
CNC Programmer	SR	199	Mathematics		AST 201			
Commercial Floristry Technician	C	182	Mechanized Agriculture	C AS	153			
Communication Studies	C AA AST	174	Medical Assisting	C AS	202			
Computer Applications Specialist	C	175	Music	AA AAT	204			
Computer Electronics	C AS	176	Natural Sciences		GSE 190			
Computer Graphics Applications	C AS	177	Nursery Production	C	183			
Computer Information Systems	AS	177	Nurse Assistant (for CNA)	SR	213			
Computer Network Administration	C	209	Nursing, Associate's Degree (for RN)	AS	209			
Computer Network Technician	C	209						

LEGEND

AA:	Associate in Arts Degree
AAT:	Associate in Arts Degree for Transfer
AS:	Associate in Science Degree
AST:	Associate in Science Degree for Transfer
GSE:	General Studies Emphasis (Non-transfer)
UPE:	University Preparation Emphasis (for Transfer)
C:	Certificate of Achievement
SR:	Skills Recognition

Student Fees* 2015-2016

FEE	AMOUNT	DESCRIPTION
Enrollment Fee:	\$46 (per unit)	California residents must pay an enrollment fee of \$46 per unit per semester (subject to change by the California State Legislature). Enrollment fees may be waived for students who qualify for the Board of Governors Grant Fee Waiver Program and for those who enroll in apprenticeship courses only. Dependents of service-connected disabled or service-connected deceased veterans may be eligible for a waiver of fees. Please contact the campus Veteran's Office in the Student Services Building, Room 201 for assistance. For fee waiver information students should contact the Financial Aid Office in Yosemite Hall. Special part-time students are students who are concurrently enrolled in K-12th grade and who enroll in fewer than 12 units at a community college. They are exempt from paying the enrollment fee. To be eligible to enroll in courses, special part-time students must be prepared to undertake college-level work and must be approved by the student's high school principal and parent or legal guardian. At MJC, special part-time students must be at least 14 years of age. Special part-time students may enroll in a maximum of 11 units per semester.
Non-Resident Tuition:	\$217 (per unit)	A U.S. citizen who is not a legal resident of California and all others who are classified as non-residents are required to pay a non-resident tuition fee of \$217 per unit per semester. The international student tuition fee is \$217 per unit per semester. The tuition fee is in addition to the Enrollment Fee and all other required fees.
Health Fee:	\$18	A \$18 Health Fee must be paid each semester (\$15 Summer) by students who enroll in a credit course that is longer than 16 hours, held on-campus or off-campus within the district, or those enrolled in non-credit courses held on campus, or those enrolled in on campus contract education courses. The Health Fee may be waived for students who are indentured apprentices enrolled in apprenticeship classes only, or for those who depend exclusively on prayer for healing, with approval of the Vice President of Student Services. Per Education Code Section 76355, fee subject to change by \$1 based on the <i>Implicit Price Index</i> for State and Local Government Agencies.
Student Center Fee:	\$1	Students voted in Spring 2000 to assess a Student Center fee of \$1 per unit to a maximum of \$10 per fiscal year, to establish an annual building/operating fund for the Mary Stuart Rogers Student Learning Center on the West Campus.
Student Representation Fee:	\$1	A \$1 fee established by two-thirds vote of the student body. Money collected will be used by ASMJC to represent student concerns at local, state, and federal government levels. Students may refuse to pay the fee for religious, political, financial, or moral reasons. A refusal to pay the fee must be submitted in writing to the Business Services Office.
Student Benefits Fee:	\$5	Payment gives you automatic membership in ASMJC (Associated Students of Modesto Junior College) and discounts (See "Student Benefit Sticker on page 77 for more information). This optional \$5 fee is automatically assessed. You may refuse to pay this fee by completing the <i>Student Benefit Fee Waiver</i> form available in the Business Office, or PiratesNet under Online Forms.
Parking Fee:	(Varies)	Student parking permits are available for \$30 a semester (summer term is \$15) or \$2 per day. Motorcycle fee is \$7.50 per semester. The parking fee is not required for disabled students with a disabled DMV placard. Parking permits must be picked up in person. Picture ID is required. Students who purchase an auto permit for the semester and have proof of a motorcycle license are eligible for a free motorcycle permit for the same semester. Parking fees are subject to change.
Debts To The College:	(Varies)	Any individual who has incurred, but not paid, a debt to the college may be denied grades, transcripts, degrees, some services, and registration privileges.
Materials Fees:	(Varies)	This serves as payment for required instructional and other materials which are of continuing value to the student outside of the classroom setting and which the student must procure or possess as a condition of registration, enrollment, or entry into a class; or any material which is necessary to achieve the required objectives of a course.
Other Expenses:	\$200 - \$600	Textbooks, stationery and supplies will amount to approximately \$200 to \$600 per semester.
Transcript Verification:	(Varies)	The first two transcripts are provided free. A fee of \$10.00 per transcript is charged after the first two, payable at the time of the request. A \$15.00 fee is charged for 24-hour transcript service, and a \$20.00 fee is charged for on-the-spot transcript service.
Enrollment Verification:	(See note)	The first two verifications are provided free. A fee of \$7 per verification is charged after the first two, payable at the time of the request. A \$15 fee is charged for next day service and a \$20 fee is charged for same-day service. No charge is made for loan deferment or financial aid GPA verifications. See "Enrollment and Grade Verification" on page 66 for more information.
Course Audit Fee:	\$15 (per unit)	A fee of \$15 per unit is required of students who have met the repetitions limit for credit courses, payable at the MJC Business Services Offices. Students enrolled in 10 or more units at the time audit enrollment occurs will not be assessed the fee for up to 3 units.
Other Fees:	(Varies)	Fines for overdue library books or other equipment and parking fines are among special charges authorized by the Board of Trustees
Field Trip Fees:	(Varies)	Appropriate fees will be charged for those field trips scheduled to destinations outside California and for some long distance field trips outside the Yosemite Community College District.

* Fees are subject to change through State Legislation and Governing Board implementation as judged to be in the best interest of the California Community Colleges and the students at Modesto Junior College.

Policy 3410 Non-Discrimination

It is the policy of Yosemite Community College District to provide an environment free of unlawful discrimination. Discrimination on the basis of ethnic group identification, religion, age, sex or gender, sexual orientation, color or physical or mental disability in the District's programs, activities and work environment is unlawful and will not be tolerated by the District.

The District strongly forbids any form of discrimination and has enacted complaint resolution procedures to recognize and eliminate unlawful discrimination.

<http://www.yosemite.edu/Trustees/boardpolicy.htm>

UNIT REQUIREMENTS FOR SPECIAL POPULATIONS

Varsity Athletics

Minimum of 12 units during the season of sport. Students dropping below 12 units are not eligible for competition until they are once again actively enrolled and attending class in at least 12 units. Of the 12 units, at least 9 shall be attempted in courses counting toward remediation, career technical education/certificate courses, associate degree requirements, transfer/general education, and /or lower division theoretical major preparation courses as defined by the college catalog and/or articulation agreements and be consistent with the student athlete's educational plan.

To be eligible and remain eligible in intercollegiate athletics competition a student athlete has to successfully complete at least 6 units during the preceding academic term in which the student is enrolled as a full-time student during the preceding academic term in which the student is enrolled as a full-time student with a cumulative 2.0 GPA beginning with and including the units taken during the first semester of competition.

To be eligible for the second season of that sport, a minimum of 24 units must be successfully completed. The 24 units count begins with and includes the units taken during the first semester of competition for that sport and must be successfully completed prior to the beginning of the semester of the second season of sport.

In order to be eligible for competition, the student athlete must have comprehensive individual educational plan on file by the following dates: October 15 for those student athletes whose first competition, in any sport, occurs during the fall academic term; March 1 for those student athletes whose first competition, in any sport, occurs during the spring academic term.



MJC Guidance & Activities Requirements for Associate Degree

In Partial Fulfillment of the Requirements for Associate's Degree for 2015-2016

Students who plan to earn an associate's degree at MJC must complete the MJC Guidance & Activities Requirements*. By completing the Guidance Requirement, students will learn about requirements for graduation, various educational and career options, resources at MJC, as well as create an Educational Plan to ensure that courses taken at MJC are appropriate for their short and long-term goals. By completing the Activities Requirement, students will participate in courses that demonstrate creativity, collaboration, teamwork, and/or self-expression.

I. Guidance Requirement: Complete one course during first semester.

AG 115	Intro to Ag Educ & Careers	(1)(F02)	GUIDE 111	Career Exploration	(1)	GUIDE 120	Succ Start for Transfer Stdnts	(3)(F99)
GUIDE 109	Intrntl Student/Nw Amer Focus	(1)	GUIDE 112	Job Hunting Skills	(1/2)	STSK 78	College Study Skills	(3)(F02)
GUIDE 110	Intro to College	(1/2)	GUIDE 116	Orient for Re-Entry Adults	(2)			

II. Activities Requirement: Complete two (2) units

AG 100A/B	Leadership in Agriculture	(1,2)(F98)	MUSA 154	Appl Vocal Repertoire 2	(1)(SU11)	SOCSC 58	Student Leadership Dev't	(2)
ART 108	Ceramics	(3)	MUSA 155	Vocal Master Class	(1)(SU11)	THETR 103	Dance Rhrl, Performance	(2)(SU08)
ART 109	Ceramics 2	(3)	MUSA 161	Elementary Strings	(1)	THETR 105	Intro to Stagecraft	(3)(SU12)
ART 110	Ceramics 3	(3)	MUSA 162	Interm Strings	(1)(SU13)	THETR 117	Ballet 3	(1)(SU13)
ART 121	Basic Drawing 2	(3)	MUSA 163	Appl Music (Violin and Viola)	(1)(SU11)	THETR 118	Ballet 4	(1)(SU13)
ART 123	Figure Drawing	(3)	MUSA 164	Appl Music (Cello and Bass)	(1)(SU11)	THETR 129	Jazz 2	(1)(SU12)
ART 125	Color & 3 D Fndtns Design	(3)	MUSA 173	Appl Music (Brass,Percuss)	(1)(SU07)	THETR 130	Jazz Interm/Adv	(1)(SU13)
ART 129	Figure Drawing 2	(3)(SU13)	MUSA 183	Appl Music (Woodwinds)	(1)(SU11)	THETR 131	Fund of Choreography	(3)(F02)
ART 141	Sculpture 2	(3)	MUSC 111	Recording Arts 1	(2)(F01)	THETR 133	Rhrl & Perf 1	(2)(SU13)
ART 142	Sculpture 3	(3)	MUSC 112	Recording Arts 2	(2)(SU08)	THETR 134	Rhrl & Perf 2	(2)(SU13)
ART 147	Painting 1 (in Acrylic)	(3)(F06)	MUSC 121	Intro to Synthesizer & MIDI	(2)	THETR 135	Rhrl & Perf 3	(2)(SU14)
ART 148	Painting 1 (In Oil)	(3)	MUSC 122	Electronic Music 2	(1)	THETR 136	Rhrl & Perf 4	(2)(SU14)
ART 149	Painting 2	(3)	MUSC 126	Music Prod for Multimedi	(2)(SU08)	THETR 149	Dance & Rep Touring Comp	(1)(SU13)
ART 158	Painting 3	(3)(SU13)	MUSE 145	Guitar Orchestra	(1)(F03)	THETR 151	Dance Rhrl & Perf 1	(2)(SU13)
ART 159	Mural Painting	(3)(SU13)	MUSE 151	Masterworks Chorus	(1)	THETR 152	Dance Rhrl & Perf 2	(2)(SU13)
ART 173	Digital Imaging for Photog	(3)(F02)	MUSE 155	Concert Choir	(1)	THETR 153	Contemp Pop Dance Rhrl Perf	(2)(SU13)
ART 175	Color Photography	(3)	MUSE 156	Chamber Choir	(1)	THETR 154	Dance Rhrl & Perf 3	(2)(SU14)
ART 191	Photo Lab Technology 2	(1)(F01)	MUSE 161	Community Orchestra	(1)(F99)	THETR 155	Dance Wkshp Perf	(2)(SU13)
CMPGR 284	Beginning After Effects	(3)	MUSE 165	String Orchestra	(1)	THETR 159	Rhrl/Perf - Music Thtr	(2)(SU10)
COMM 105	Intercollegiate Forensics	(3)	MUSE 171	Concert Band	(1)	THETR 164	Improvisational Acting	(3)(SU07)
ENGL 108	Creative Writing: Autobiography	(3)	MUSE 175	Symphonic Band	(1)	THETR 168	Dance Rhrl & Perf 4	(2)(SU14)
*FSCI 262	Fire Science Physical Training	(1)(SU15)	MUSE 176	Chamber Ensmbl (Band)	(1)(SU07)	THETR 170	Hip Hop	(1)(SU13)
MUSA 121	Keyboard Skills 1	(1)	MUSE 181	Jazz Band	(1)	THETR 174	Stage Makeup	(3)(SU12)
MUSA 122	Piano Enrichment	(1)	MUSP 151	Musical Thtr Workshop	(2)	THETR 175	Stage Costuming	(3)
MUSA 123	Interm Piano	(1)(SU11)	MUSP 153	Adv Musical Thtr Wkshp	(2)	THETR 176	Modern Dance 4	(1)(SU14)
MUSA 124	Advanced Piano	(2)(SU11)	MUST 130	Practica Musica	(1)(SU11)	THETR 177	Ballet 2	(1)(SU12)
MUSA 135	Elementary Harpischord	(1)(F99)	MUST 131	Aural Skills 1	(1)(SU13)	THETR 178	Intro to Scenery Design	(3)
MUSA 141	Elementary Guitar	(1)	MUST 132	Aural Skills 2	(1)(SU13)	THETR 185	Modern Dance 1	(1)(F01)
MUSA 142	Guitar Perf	(1)(SU11)	MUST 133	Aural Skills 3	(1)(SU15)	THETR 186	Modern Dance 2	(1)(F01)
MUSA 143	Guitar Enrichment	(1)(F03)	MUST 134	Aural Skills 4	(1)(SU13)	THETR 187	Modern Dance 3	(1)(F01)
MUSA 144	Interm Guitar	(1)(SU11)	MUST 141	Musician & Guided Listen 1	(1)(SU14)	THETR 188	Jazz 1	(1)(F01)
MUSA 145	Appl Classical Guitar	(1)(F01)	MUST 142	Musician & Guided Listen 2	(1)(SU14)	THETR 189	Ballet 1	(1)(F01)
MUSA 151	Elementary Voice	(1)	MUST 143	Musician & Guided Listen 3	(1)(SU14)	THETR 190	Thtr Production Workshop	(1)
MUSA 152	Elementary Voice 2	(1)	MUST 144	Musician & Guided Listen 4	(1)(SU14)	THETR 192	Rhrl & Perf	(2)
MUSA 153	Appl Vocal Repertoire 1	(1)(SU11)	PE -	All Activities Courses	(1,2,3)	THETR 195	Movement for Perf Artists	(3)(F01)
						THETR 196	Stage Mgmt	(3)(SU13)

***MJC Activities Requirement:**

In addition to the courses already listed in the catalog for MJC Activities requirement, students can also complete the following course option:

FSCI 262 Fire Science Physical Training (1) (SU15)

The following students are exempt from Guidance and Activities requirements:

- Students who possess a baccalaureate or higher degree completed at a regionally accredited college or university will have satisfied general education and competency requirements including guidance and activities for the associate in arts or associate in science degree.
- Students who plan to complete an AA-T or AS-T associate degree at Modesto Junior College. Veterans or reservists who submit proof of U.S. military Basic Training will receive two (2) units of activities. File copy of DD214 with MJC Veterans Office.

*Reflects Curriculum Committee Guidance/Activities approvals effective Summer 2015. Revised 9/23/15 RAC/SP

Courses

CHEM 150—EXPLORING OUR CHEMICAL ENVIRONMENT 3 UNITS

54 Lecture Hours

Prerequisite: Satisfactory completion of MATH 70 or qualification by the MJC assessment process.

Chemical perspective of environmental topics including acid rain and global warming. Basic chemical principles are developed in order to understand such items as conventional, nuclear, and alternative energy sources, air and water pollution, fertilizers, pesticides, food preservatives, genetic engineering, and medicines and drugs. Field trips might be required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU, UC) (CC: CHEM 20) (C-ID: CHEM 100) **General Education:** (MJC-GE: A) (CSU-GE: B1) (IGETC: 5A)

CSCI 271—PROBLEM SOLVING AND PROGRAMMING 1 3 UNITS

Formerly listed as: CMPSC - 205: Problem Solving and Programming 1

27 Lecture Hours, 8 Lab Hours

Prerequisite: Satisfactory completion of CSCI 270.

First course for Computer Science transfer majors, but open to all students. Emphasizes object-oriented programming, algorithmic design, and problem analysis skills for computer science. Software engineering skills will be emphasized. Solutions will be implemented using a high-level object-oriented programming environment such as C++, C#, or JAVA. Extensive programming projects demonstrating problem solving and implementation skills will be assigned throughout the semester. Field trips might be required. (A-F or P/NP) **Transfer:** (CSU, UC) (CC: CCTPG 22) (C-ID: COMP 122,) **General Education:** (MJC-GE: D2)

CSCI 272—PROBLEM SOLVING AND PROGRAMMING 2 3 UNITS

Formerly listed as: CMPSC - 261: Problem Solving and Programming 2

27 Lecture Hours, 81 Lab Hours

Prerequisite: Satisfactory completion of CSCI 271.

Introduction to data structures implemented using object-oriented design. Includes more advanced features of high-level languages such as C++ or Java. Continued emphasis on good programming methodologies and problem solving techniques and analysis. Emphasis on algorithm efficiency, recursive algorithms, and linked lists, stacks, queues, and trees. Field trips might be required. (A-F or P/NP) **Transfer:** (CSU, UC) (CC: CCTPG 24) (C-ID: COMP 132,) **General Education:** (MJC-GE: D2)

CSCI 273—ASSEMBLY LANGUAGE PROGRAMMING 3 UNITS

Formerly listed as: CMPSC - 241: Assembly Language Programming

27 Lecture Hours, 81 Lab Hours

Prerequisite: Satisfactory completion of CSCI 271.

First course in computer architecture and assembly language programming. Data representation and manipulation, CPU organization and memory, addressing modes, logic and control, table processing, and I/O control processes will be examined. Macros,

program modules, and interrupts will be studied. Extensive hands-on computer projects implementing course objectives will be assigned. Field trips might be required. (A-F or P/NP) **Transfer:** (CSU, UC) (C-ID: COMP 142) **General Education:** (MJC-GE: D2)

ELTEC 236—HMI & INDUSTRIAL COMMUNICATIONS 2 UNITS

18 Lecture Hours, 54 Lab Hours

Prerequisite: Satisfactory completion of ELTEC 232.

Provides students with the skills in designing and using Human Machine Interface (HMI) systems using industrial communications. The course provides basic concepts, features and operations of HMI systems using typical Programmable Logic Controllers (PLCs), Programmable Automation Controllers (PAC's) and other devices. Field trips are not required. Not repeatable. (A-F Only) **Transfer:** (CSU)

FSCI 262—FIRE ACADEMY PHYSICAL TRAINING 1 UNIT

54 Lab Hours

Corequisite: Concurrent enrollment in FSCI 362 or FSCI 363.

This course is designed to provide physical fitness preparation and assessment of students registered in the MJC Regional Fire Training Fire Academy. Field trips are not required. Not repeatable. (P/NP Only) **Transfer:** (CSU) **Local Requirement:** (Activities*)

GEOL 176—GEOLOGY OF CALIFORNIA'S MOTHER LODGE 0.5 UNITS

9 Disc Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to be enrolled in or have successfully completed any geology or earth science course, or get consent of the instructor.

History of the California Gold Rush and application of the principles of geology to interpret rock sequences and tectonic structures revealed in the California Mother Lode. Field trips are required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU)

GEOL 181—GEOLOGY OF SEQUOIA AND KINGS CANYON 1 UNIT

18 Disc Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to be enrolled in or have successfully completed any geology or earth science course, or get consent of the instructor.

Application of the principles of geology to interpret rock sequences and tectonic structures at Sequoia and Kings National Parks in the southern Sierra Nevada. Requires ability to work and study under rigorous conditions. Field trips are required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU)

GEOL 182—GEOLOGY OF THE CALIFORNIA COASTLINE **1 UNIT**

18 Disc Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to be enrolled in or have successfully completed any geology or earth science course, or get consent of the instructor.

Application of the principles of geology to interpret rock sequences, tectonic structures, coastal processes, and coastal landforms along the central California coastline. Requires ability to work and study under rigorous conditions. Field trips are required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU)

GEOL 186—GEOLOGY OF THE EASTERN SIERRA NEVADA **2 UNITS**

36 Lecture Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to be enrolled in or have successfully completed any geology or earth science course, or get consent of the instructor.

Application of the principles of geology to interpret rock sequences and tectonic structures in the eastern Sierra Nevada and Owens Valley of California. Requires ability to work and study under rigorous conditions. Field trips are required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU)

GEOL 190—INTERNATIONAL GEOLOGY FIELD STUDIES **3 UNITS**

54 Disc Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to be enrolled in or have successfully completed any geology or earth science course, or get consent of the instructor.

Application of principles of geology through extended field studies at geologically significant sites overseas and in international settings. Requires ability to work and study under rigorous conditions. Field trips are required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU)

HIST 192—INDEPENDENT STUDIES IN HISTORY **2 UNITS**

36 Lecture Hours

Limitations on Enrollment: Enrollment limited to students who receive instructor approval of completed Independent Study proposal.

Directed study of independent projects in history, with personalized instruction beyond the standard course work. Instructor approval is required. Field trips are not required. Not repeatable. (A-F Only) **Transfer:** (CSU)

LOGST 200—INTRODUCTION TO LOGISTICS **3 UNITS**

54 Lecture Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to be familiar with financial spreadsheet software and Internet searches.

Fundamental concepts of logistics with an emphasis on outbound goods movement. Techniques of organizing, analyzing and controlling logistics systems. Topics include: supply chain, packaging, customer service, transportation, warehouse and distribution center site selection and procurement functions. Field trips might be required. Not repeatable. (A-F Only) **Transfer:** (CSU)

NURSE 270—NURSING PROCESS: PHARMACOLOGY **2 UNITS**

Formerly listed as: NURSE - 260: Nursing Process: Pharmacology

36 Lecture Hours

Limitations on Enrollment: Enrollment limited to students who have been accepted into the Associate Degree Nursing Program.

Introduction to concepts of pharmacology, including pharmacokinetics, pharmaceutical systems of measurements & calculations, drug classifications, and nursing responsibilities in medication administration. Field trips are not required. Not repeatable. (A-F Only) **Transfer:** (CSU)

PE 126—INTRODUCTION TO SPORT MANAGEMENT **3 UNITS**

54 Lecture Hours

Introduction to the philosophy, organization, issues and career paths of sport management. Study will include career opportunities in sport enterprises, agencies and facilities, basic management functions, scope of sport managers' responsibilities and a survey of relevant literature. Field trips are not required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU)

PEM 108—BASEBALL **1 UNIT**

54 Lab Hours

Fundamentals and theory of collegiate baseball. Field trips are not required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEM 114—ADVANCED BASKETBALL **1 UNIT**

54 Lab Hours

Advanced skills, theory, and concepts of competitive basketball team play. Not repeatable. (A-F or P/NP) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEM 141XA—ADVANCED TOUCH FOOTBALL **0.5-1 UNIT**

X= 27 Lab Hours A= 54 Lab Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to have previously participated in high school and/or intercollegiate sports requiring strength, agility, and physical conditioning.

Conditioning, skills, rules and strategies with emphasis on the passing game to prepare for participation in advanced football. Field trips are not required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEM 165—SOCCER 3 **1 UNIT**

54 Lab Hours

Practical application of collegiate offensive and defensive tactics; individual and team skills, match strategy, and application of the rules. Field trips are not required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEM 196—ADVANCED WRESTLING **1 UNIT**

54 Lab Hours

Advanced wrestling and training methods, and the philosophy behind winning at advanced levels of competition. Field trips are not required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEVM 101XABC—TRAINING & CONDITIONING FOR BASEBALL 0.5-3 UNITS

X= 27 Lab Hours A= 54 Lab Hours B= 108 Lab Hours C= 162 Lab Hours

Limitations on Enrollment: Enrollment limited to students who demonstrate intercollegiate baseball skills as determined by the coaching staff.

Prepares the collegiate baseball player mentally and physically for competitive play and reduces risk of injury. Includes collegiate level baseball skill and strategy development, conditioning, sport specific strength training, agility work, speed training, and flexibility exercises; as well as team play activities. Four completions allowed, Field trips might be required. (A-F Only) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEVM 141XABC—TRAINING & CONDITIONING FOR WATER POLO 0.5-3 UNITS

X= 27 Lab Hours A= 54 Lab Hours B= 108 Lab Hours C= 162 Lab Hours

Limitations on Enrollment: Enrollment limited to students who demonstrate intercollegiate athletic skills as determined by the coaching staff.

Prepares the collegiate water polo player mentally and physically for competitive play and reduces risk of injury. Includes collegiate level water polo skills and strategy development, conditioning, sport specific strengths training, agility work, speed training, flexibility exercises; as well as team play activities. Four completions allowed, Field trips might be required. (A-F Only) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEVW 100—WOMEN'S VARSITY BASKETBALL - FALL 2 UNITS

108 Lab Hours

Limitations on Enrollment: Enrollment limited to students who demonstrate collegiate level basketball skills, as determined by the coaching staff.

Instruction, training, and competition in intercollegiate basketball. (Fall semester) Four completions allowed, Field trips are not required. (A-F Only) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEVW 102XABC—TRAINING & CONDITIONING FOR BASKETBALL 0.5- 3 UNITS

X= 27 Lab Hours A= 54 Lab Hours B= 108 Lab Hours C= 162 Lab Hours

Limitations on Enrollment: Enrollment limited to students who demonstrate intercollegiate athletic skills as determined by the coaching staff.

Prepare the collegiate basketball player mentally and physically for competitive play and reduces risk of injury. Includes collegiate level basketball skill and strategy development, conditioning, sport specific strength training, agility work, speed training, flexibility exercises; as well as team play activities. Four completions allowed, Field trips are not required. (A-F Only) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEVW 141XABC—TRAINING & CONDITIONING FOR VOLLEYBALL 0.5-3 UNITS

X= 27 Lab Hours A= 54 Lab Hours B= 108 Lab Hours C= 162 Lab Hours

Limitations on Enrollment: Enrollment limited to students who demonstrate intercollegiate volleyball skills as determined by the coaching staff.

Prepares the collegiate volleyball player mentally and physically for competitive play and reduce risk of injury. Includes collegiate level volleyball skill and strategy development, conditioning, sport specific strength training, agility work, speed training, and flexibility exercises; as well as team play activities. Four completions allowed, Field trips might be required. (A-F Only) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEW 163—SOCCER 2

1 UNIT

54 Lab Hours

Practical application of intermediate defensive and offensive tactics; individual and team skills, match strategy, and application of the rules, Filed trips are not required. Not repeatable. (A-F Only) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

PEW 180—WOMEN'S SOFTBALL

1 UNIT

54 Lab Hours

Discussion and practical application of fast-pitch softball rules, strategy, fielding, throwing, base running, team offense, and team defense Field trips are not required. Not repeatable. (A-F or P/NP) **Transfer:**(CSU, UC) **Local Requirement:** (Activities)

PHYS 180—CONCEPTUAL PHYSICS: A HANDS-ON APPROACH

4 UNITS

54 Lecture Hours, 54 Lab Hours

Prerequisite: Satisfactory completion of MATH 89 or MATH 90 or qualification by the MJC assessment process.

A survey course of selected topics in physical inquiry to include motion, waves, heat, energy, electricity, magnetism and modern physics. Physical theory is explored on a conceptual level with emphasis placed on applying physical principles to everyday phenomena. To include a weekly activity/laboratory session designed to provide students with practical experience in applying physical concepts. Field trips are not required. (A-F or P/NP) **Transfer:** (CSU, UC) **General Education:** (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: 5A, 5C)

RSCR 250—CLINICAL 3

3.5 UNITS

189 Lab Hours

Prerequisite: Satisfactory completion of RSCR 232.

Corequisite: Concurrent enrollment in RSCR 240 and RSCR 242.

Limitations on Enrollment: Enrollment limited to students accepted into the Respiratory Care Program.

Clinical experience in the various critical care respiratory procedures and the equipment used for these procedures in area hospitals. Field trips are not required. Not repeatable. (P/NP Only) **Transfer:** (CSU)

RSCR 252—PHYSICIAN ROUNDS FOR RESPIRATORY CARE

0.5 UNITS

27 Lab Hours

Prerequisite: Satisfactory completion of RSCR 242.

Opportunity for interaction between physicians and respiratory care students to determine the appropriateness of a respiratory care plan; includes use of computer instruction in formulating adequate care plans and use of respiratory care protocols. Field trips might be required. Not repeatable. (P/NP Only) **Transfer:** (CSU)

SOCIO 105—INTRODUCTION TO STATISTICS **3 UNITS**
FOR THE SOCIAL & BEHAVIORAL SCIENCES

54 Lecture Hours

Prerequisite: Satisfactory completion of MATH 89 or MATH 90 or qualification by the MJC assessment process.

Introduction to statistics for students in the social and behavioral sciences. Topics will include descriptive and inferential statistics, scales of measurement, measures of central tendency and variability, correlation and regression, probability distributions (including the normal, t, and chi-square distributions), and hypothesis testing. Course will include application of statistical software to data from the social and behavioral sciences. Field trips are not required. Not repeatable. (A-F or P/NP) **Transfer:** (CSU, UC) (C-ID: SOCI 125)
General Education: (MJC-GE: D2)

THETR 192—REHEARSAL & PERFORMANCE **2 UNITS**

108 Lab Hours

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete THETR 100.

Participation and instruction in rehearsal and performance of a role in an MJC production. Required activities may include all aspects involved in the production of plays as well as rehearsal. Field trips are required. (A-F or P/NP) **Transfer:** (CSU, UC) **Local Requirement:** (Activities)

TUTOR 110—INTRODUCTION TO TUTORING COMPOSITION **1 UNIT**

18 Lecture Hours

Formerly listed as: ENGL - 183: Introduction to Tutoring Composition

Prerequisite: Satisfactory completion of ENGL 101.

Corequisite: Concurrent enrollment in or satisfactory completion of TUTOR 100.

Introductory course in the tutoring processes of cross-curricular composition. Students will learn strategies for tutoring developmental to advanced writers. Specific focus will be on techniques for improvement of fluency, structure, revision, proofreading, and reading. Intended for students selected as tutors for the Library & Learning Center's Writing Center. Field trips are not required. Not repeatable. (P/NP Only) **Transfer:** (CSU)

WKFSK 810—SKILLS TO SUCCEED AT A NEW JOB **0 UNITS**

18 Lecture Hours

Intended for those re-entering the workforce, or just starting to work, and looking for skills to achieve success as a new employee. Explores in depth job retention skills including job transition concepts, employer expectations, customer service, attitude, feedback and balancing work and personal life. Course is repeatable, Field trips might be required. (Non-Graded course)

PROGRAMS

Agriculture Business PROGRAM (209) 575-6200

A.S. DEGREE: AGRICULTURE: SALES, SERVICE

The student will learn step-by-step sales techniques, stage presence, self-evaluation of voice, habits, abilities in sales, and understanding of sales career. This program will help students make decisions as to whether or not they are qualified in sales, and prepare them for a sales career if they choose that vocation. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Evaluate market trends and create a marketing plan for an agricultural product or commodity.
2. Organize and prepare reports, presentations, and financial documents pertaining to agriculture business.
3. Create a customer profile and employ a sales strategy based on that profile.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 109) or the University Preparation Pathway (p. 103) which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 * [NP] Introduction to Agricultural Education & Careers	1
AG 249 ** [NP] Agriculture Internship	2 OR
AG 349ABCD ** [NP] Work Experience Agriculture - Supervised Practice	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

AGM 200 [NP] Introduction to Mechanical Technology	3
ANSC 200 [NP] Introduction to Animal Science	3
NR 200 [NP] Soils	4
PLSC 200 [NP] Introduction to Plant Science	3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

AGEC 200 [2-4] Agricultural Accounting & Analysis	3
AGEC 210 [NP] Elements of Agricultural Economics	3
AGEC 215 [NP] Agricultural Marketing	3
AGEC 280 [1, 2] Agricultural Sales and Service	3

IV. ELECTIVE COURSES - COMPLETE 3 UNITS

AG 280 [NP] Agricultural Computations	3
AG 285 [NP] Agricultural Communications	3
AGEC 220 [2, 4] Agricultural Business Management	3
AGEC 225 [1] Agriculture Computer Applications	3
COMM 100 [NP] Fundamentals of Public Speaking	3
COMM 102 [NP] Introduction to Human Communication	3

TOTAL UNITS IN A.S. MAJOR 29

**Work experience/internship must be agriculture related.

*Required

Athletic Training/Sports Medicine PROGRAM (209) 575-6269

A.S. DEGREE: ATHLETIC TRAINING/SPORTS MEDICINE

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Complete the transfer pattern to successfully transfer to a four (4) year degree program.
2. Apply critical thinking to utilize protocols in regard to safely designing and monitoring the various preventive and rehabilitative techniques, as well as administering emergency care.
3. Demonstrate competence in Athletic Training concepts, NATA competencies, and NATA theoretical perspectives and current research.

PROGRAM REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 109) or the University Preparation Pathway (p. 103) which include completion of the requirements below. Courses should be selected with the assistance of an Athletic Training faculty advisor.

REQUIRED COURSES - COMPLETE 31 UNITS

PE 108 [NP] Care and Prevention of Athletic Injuries	3
PE 111 [NP] Application of Sports Medicine	3
ANAT 125 [NP] Human Anatomy	5

CHEM 143 [NP] Introductory College Chemistry.....	4
HE 101 [NP] Emergency Medical Response; CPR Pro/Healthcare Provider.....	3
HE 110 [NP] Healthful Living	3
PHYSO 101 [NP] Introductory Human Physiology	5
PSYCH 101 [NP] General Psychology	3
PE 141 [NP] Supervision in Athletic Training.....	2 OR
PE 142 [2] Supervision in Athletic Training 1.....	2 OR
PE 143 [3] Supervision in Athletic Training 2.....	2 OR
PE 144 [4] Supervision in Athletic Training 3.....	2
TOTAL UNITS IN A.S. MAJOR	31

Automotive Technology

PROGRAM

(209) 575-6332

CERTIFICATE OF ACHIEVEMENT: **AUTOMOTIVE MAINTENANCE**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Demonstrate compliance with current automotive industry safety and environmental standards.*
2. *Perform maintenance and repair operations in accordance with ASE standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COMPETENCIES

MATH 20 Pre-Algebra	5
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REQUIRED COURSES - Complete 3 Courses

AUTEC 311 Basic Automotive Systems	4
AUTEC 368 A6: Automotive Electricity/Electronic Systems 1	3.5
ELTEC 208 The World of Electricity and Electronics	3 or
MACH 211DE Machine Tool Technology 1	4 or
MACH 301 Machine Shop 1	3

ELECTIVE COURSES - Complete 19 units

AUTEC 315 Engine Rebuilding	3.5
AUTEC 317 Auto Heating & Air Conditioning	3.5
AUTEC 319 A8: Engine Performance	3.5
AUTEC 321 A5: Brakes Systems	3.5
AUTEC 322 A4: Steering, Suspension and Alignment	3.5
AUTEC 323 A2: Automatic Transmission & Transaxles	3.5
AUTEC 324 A3: Manual Trans and Dr Axles	3.5
AUTEC 369 A6: Automotive Electricity 2	4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....29.5-30.5

CERTIFICATE OF ACHIEVEMENT: **AUTOMOTIVE SERVICE**

The Automotive Technology program is designed to provide training in automobile repair, maintenance theory, study of factory manuals and publications, and applications of methods used in the auto servicing and repair industry. The Automotive Technology Program offers two levels of training: Automotive Technician and Maintenance Mechanic. The Maintenance Mechanic requires less course work. It provides the student with basic automotive skills to perform basic maintenance and service tasks. The Technician program of instruction requires additional training in the more sophisticated technologies. This program prepares students to enter technician jobs that perform diagnostic and repair on complex automotive systems.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Demonstrate compliance with current automotive industry safety and environmental standards.*
2. *Perform routine vehicle service operations in accordance with ASE standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES: COMPLETE 10.5 UNITS

AUTEC 200 [1] Automotive Service Management.....	3
AUTEC 311 [1] Basic Automotive Systems	4
AUTEC 368 [1, 2] A6: Automotive Electricity/Electronic Systems 1	3.5

ELECTIVE COURSES: COMPLETE 21 UNITS

AUTEC 315 [2, 3] Engine Rebuilding.....	3.5
AUTEC 317 [2, 3] Auto Heating & Air Conditioning	3.5
AUTEC 321 [2, 3] A5: Brakes Systems	3.5
AUTEC 322 [2, 3] A4: Steering, Suspension and Align	3.5
AUTEC 323 [2, 3] A2: Automatic Transmission & Transaxle.....	3.5
AUTEC 324 [2, 3] A3: Manual Trans and Dr Axles	3.5
AUTEC 369 [2, 3] A6: Automotive Electricity 2	4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....31.5

CERTIFICATE OF ACHIEVEMENT: **AUTOMOTIVE TECHNICIAN**

The Automotive Technology program is designed to provide training in automobile repair, maintenance theory, study of factory manuals and publications, and applications of methods used in the auto servicing and repair industry. The Automotive Technology Program offers two levels of training: Automotive Technician and Maintenance Mechanic. The Maintenance Mechanic requires less course work. It provides the student with basic automotive skills to perform basic maintenance and service tasks. The Technician program of instruction requires additional training in the more sophisticated technologies. This program prepares students to enter technician jobs that perform diagnostic and repair on complex automotive systems.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. Demonstrate compliance with current automotive industry safety and environmental standards.
2. Perform maintenance and repair operations in accordance with ASE standards.

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COMPETENCIES

MATH 20 Pre-Algebra5

REQUIRED COURSES - COMPLETE 3 COURSES

AUTEC 311 Basic Automotive Systems4
 ELTEC 208 [2,3] World of Electricity and Electronics3 or
 MACH 301 Machine Shop 13 or
 MACH 211D Machine Tool Technology 14
 AUTEC 368 A6: Automotive Electricity/Electronic Systems 13.5

ELECTIVE COURSES - COMPLETE 28 UNITS

AUTEC 315 Engine Rebuilding3.5
 AUTEC 317 Auto Heating & Air Conditioning3.5
 AUTEC 319 A8: Engine Performance3.5
 AUTEC 320 L1: Advanced Engine Performance4
 AUTEC 321 A5: Brakes Systems3.5
 AUTEC 322 A4: Steering, Suspension and Align3.5
 AUTEC 323 A2: Automatic Transmission & Transaxles3.5
 AUTEC 324 A3: Manual Trans and Dr Axles3.5
 AUTEC 369 A6: Automotive Electricity 24

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....38-39.5

Communication Studies
PROGRAM
 (209) 575-6081

A.A. DEGREE: COMMUNICATION STUDIES

The Communication Studies Program at Modesto Junior College offers students a variety of courses which incorporate both theory and performance instruction. These include public speaking, argumentation and debate, organizational communication, intercultural and interpersonal communication, contest speaking and forensics competition which includes debate and individual events. The MJC Forensics Team has captured a number of state and national championships. The program also offers courses in practical speech communication and voice improvement. Most courses are available to students in both day and evening hours.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Construct speeches and other compositions demonstrating clarity of ideas, research skills, proper source citation, logical argument, awareness of audience, and proper outlining techniques.
2. Identify and apply principles of interpersonal communication theory to build functional relationships.
3. Demonstrate critical thinking in the analysis and production of communication.
4. Adequately debate others, present platform speeches, or perform works of literature in a classroom or outside venue.

To earn an Associate in Arts Degree, the student must complete the requirements detailed in the University Preparation Pathway (p. 103) which include completion of the requirements below. Student should consult with a Speech Communication advisor for selection of Elective Units.

REQUIRED COURSES - COMPLETE 6 UNITS

COMM 100 [1] Fundamentals of Public Speaking 3 OR
 COMM 102 [1] Introduction to Human Communication.....3
 COMM 104 [NP] Argumentation 3 OR
 COMM 107 [1] Introduction to Debate3

ELECTIVE COURSES - COMPLETE 15 UNITS

COMM 103 [2, 3, 4] Interpersonal Communication 3
 COMM 105 [NP] Intercollegiate Forensics.....3
 COMM 106 [3, 4] Group & Organizational Communication3
 COMM 110 [NP] Persuasion3
 COMM 120 [NP] Oral Interpretation3
 COMM 122 [NP] Introduction to Readers' Theatre.....3
 COMM 123 [NP] Storytelling3
 COMM 124 [2, 3, 4] Advanced Readers' Theatre3
 COMM 130 [2, 3, 4] Intercultural Communication3
 COMM 133 [2, 3, 4] Mediated Communication3
 COMM 145 [NP] Parliamentary Procedure1
 COMM 180AB [NP] Communication Studies Lab Tutoring 1 1-2

TOTAL UNITS IN A.A. MAJOR 21

Computer Programming
Specialist PROGRAM
 (209) 575-6129

CERTIFICATE OF ACHIEVEMENT: COMPUTER PROGRAMMING SPECIALIST

This Certificate of Achievement will prepare students to work as an entry level programmer in the areas of JAVA programming, C++ programming, or Visual BASIC programming.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Demonstrate a firm understanding and working knowledge of basic problem analysis, design, implementation, and maintenance.
2. Be prepared to obtain employment in an entry-level position in software engineering.
3. Employ industry-accepted coding practices and standards.
4. Implement object oriented software solutions.
5. Employ various code level debugging techniques.
6. Utilize software development tools.
7. Perform functional software testing.
8. Demonstrate professional and effective communication skills.

To earn a Certificated of Achievement Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 12 UNITS

CSCI 270 [1] Introduction to Programming	3
CSCI 271 [2] Problem Solving and Programming 1	3
CSCI 210 [2] UNIX/Linux OS	3
CSCI 221 [2] Programming with Visual Basic	3

ELECTIVE COURSES – COMPLETE 3-4 UNITS

CSCI 222 [3] Advanced Visual Basic	3
CSCI 252 [2] Script Programming for the Web.....	3
CSCI 272 [3] Problem Solving and Programming 2	3
CSCI 274 [3] Windows Programming with Visual Studio	4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....15-16



A.S.-T. DEGREE: COMPUTER SCIENCE

This program is designed to prepare students who wish to transfer to a CSU and major in Computer Science. This program will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Computer Science. Courses such as programming, discrete structures, computer architecture and organization will enable the student to demonstrate ability to engage in critical thinking and problem-solving in the application of computer science principles. The Associate in Science in Computer Science for Transfer degree includes curriculum which focuses on practical application of problem solving skills and theory. Students who complete the degree will be able to demonstrate competence in the application of computer science. The Associate in Science in Computer Science for Transfer is intended for students who plan to complete a bachelor's degree in Computer Science at a CSU campus.

Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Potential careers in the Computer Science field include Computer Programmers, Computer Science Teachers, Software and Web Developers, and Computer and Information Systems Managers.

This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

The following is required for the Associate in Science in Computer Science for Transfer (AS-T in Computer Science) degree:

- (1) Completion of 60 semester units or 90 quarter units eligible for transfer to the California State University, including the following:
 - (A) The Intersegmental General Education Transfer Curriculum (IGETC).
 - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a grade of "C or better" or a "P" in every course completed in the AA-T or AS-T Major.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. Describe the organizational structure of computer hardware and its connection to computer software.
2. Describe how formal tools of symbolic logic and discrete structures are used to model real-life situations and relate the ideas of computational induction to recursion and recursively defined structures.
3. Design, implement, test, and debug algorithms to solve a variety of problems.
4. Design, implement, test, and debug computer programs using fundamental constructs and a variety of data structures.
5. Apply structured and object-oriented approaches to the design and implementation of computer programs.

PROGRAM REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the CSU Transfer Model Curriculum which include completion of the requirements below with a C or better.

REQUIRED CORE

CSCI 271 [NP] Problem Solving and Programming 1	3
CSCI 272 [NP] Problem Solving and Programming 2	3
CSCI 273 [NP] Assembly Language Programming	3
CSCI 204 [NP] Discrete Structures for Computer Science	3
MATH 171 [NP] Calculus: First Course	5 and
MATH 172 [NP] Calculus: Second Course	5
PHYS 101 [NP] General Physics: Mechanics	4
PHYS 103 [NP] General Physics: Electricity, Magnetism, & Modern Physics	4

TOTAL UNITS REQUIRED IN A.S.-T MAJOR 30

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED 0-7

GENERAL EDUCATION (CSU GE OR IGETC) UNITS.....	37-39
ELECTIVE (CSU TRANSFERABLE) UNITS	0

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE 60

Earth Science PROGRAM (209) 575-6173

A.S. DEGREE: UNIVERSITY PREPARATION, EMPHASIS IN EARTH SCIENCES

ABOUT THIS EMPHASIS

This class is designed as an introductory study of the many branches of earth science, geology, oceanography, meteorology, and astronomy. Topics include the scientific method, natural resources, minerals, rocks, volcanism, plate tectonics, earthquakes, weathering, erosion, geological time, fresh water, oceans, ocean currents, the ocean floor, the atmosphere, clouds, storms, climate, the sun, the moon, the solar system, stars, interstellar matter, and the formation of the universe.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Identify, describe, and explain the causes and consequences of the various physical processes that transfer energy into, within, and out of the earth system.
2. Identify, describe, and explain the causes and consequences of the various chemical processes that control the transformation of matter within the earth system.
3. Identify, describe, and explain the causes and consequences of the various interactions between the biosphere and the physical components of the earth system.

EMPHASIS REQUIREMENTS

To earn an Associate in Science Degree with this emphasis, the student must complete the requirements detailed in the University Preparation Pathway (p. 103) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES: COMPLETE 23 UNITS

EASCI 161 [NP] Earth Science	4 OR
GEOL 161 [NP] Physical Geology	4
GEOL 166 [NP] Historical Geology	4
PHYS 101 [NP] General Physics: Mechanics	5 OR
PHYS 142 [NP] Mechanics, Heat, & Waves	5
MATH 171 [NP] Calculus: First Course	5
CHEM 101 [NP] General Chemistry 1	5

ELECTIVE COURSES: COMPLETE 8 UNITS

• Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select at least eight units from the following list of electives. Additional courses may be required by your transfer university.

ASTRO 151 [NP] Introduction to Astronomy Laboratory	1
ASTRO 160 [NP] Introduction to Modern Astronomy	3
BIO 101 [NP] Basic Biology	4
BIO 111 [NP] General Biology	4
CHEM 102 [NP] General Chemistry 2	5
EASCI 162 [NP] Introduction to Earth Science	4

GEOL 171XAB [NP] Geology Field Studies	0.5 - 2
GEOL 174 [NP] Geology Summer Field Studies	3
MATH 172 [NP] Calculus: Second Course	5
METEO 161 [NP] Introduction to Meteorology	4
NR 200 [NP] Soils	4
PHYS 142 [NP] Mechanics, Heat, & Waves	5
PHYS 143 [NP] Electricity, Magnetism, Optics, Atomic and Nuclear Structures	5
ZOOL 101 [NP] General Zoology	4

TOTAL UNITS IN A.S. MAJOR 31

Health and Physical Education PROGRAM (209) 575-6173

A.S. DEGREE: UNIVERSITY PREPARATION, EMPHASIS IN HEALTH AND PHYSICAL EDUCATION

Health Science draws from the biological, environmental, psychological, social, physical, and medical sciences to develop individual, group, institutional, community, and systemic strategies to improve health knowledge and attitudes as well as skills and behavior. Physical Education, also known as Kinesiology, is the scientific study of human movement, addressing physiological, mechanical, and psychological mechanisms.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Demonstrate a working knowledge of the anatomy, physiology, and microbiology of the human body in order to enter the nursing program.
2. Demonstrate a working knowledge of the anatomy and physiology of the human body in order to enter a university level physical education program.
3. Succeed on the nursing board exams in sections related to these disciplines.

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES: COMPLETE 4 COURSES

ANAT 125 [NP] Human Anatomy	5
BIO 111 [NP] General Biology	4 OR
BIO 116 [NP] Biology: A Human Perspective	4
CHEM 143 [NP] Introductory College Chemistry	4
PHYSO 101 [NP] Introductory Human Physiology	5

TOTAL UNITS IN EMPHASIS 18

Machine Tool Technology PROGRAM

(209) 575-6332

SKILLS RECOGNITION: CNC OPERATOR

The Machine Tool Technology program is designed to provide training in the operation of traditional manual as well as computer operated machine tools used to produce the mechanical components used in all industrial applications. Students will receive instruction the use of lathes, milling machines, precision grinders as well as the theory and practice of precision dimensional measurement.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Demonstrate compliance with current CNC machining safety and environmental regulations.
2. Perform CNC machine shop operations in accordance with industry recognized and accepted practices.

To earn a Skills Recognition Award, student must complete the 6 required units. This series of courses is intended to give the student a sufficient skill base to be able to operate and to edit programs for basic CNC lathes and CNC milling machines that are commonly used in manufacturing applications.

REQUIRED COURSES

MACH 219 [1] Introduction to CNC Mill Programming	2
MACH 222 [1] CNC Machine Operations	2
MACH 223 [2] Advanced CNC Machine Operations.....	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 7

Music PROGRAM

(209) 575-6081

A.A. DEGREE: MUSIC

The MJC Music Program offers courses for students wishing to earn an associate's degree in music, general education courses for non-music majors, and courses designed for community members. These include a comprehensive curriculum of music theory and musicianship. Ensemble and production courses include Concert and Symphonic Bands, Day and Evening Jazz Bands, Concert and Chamber Choirs, Masterworks Chorus,

Community Orchestra, Guitar Orchestra, opera/musical theatre productions, chamber music performances, and electronic music productions. The program also offers applied studies in piano, organ, harpsichord, guitar, voice, violin/ viola, cello/bass, woodwinds, and brass/percussion, as well as survey courses such as Music Appreciation, Introduction to World Music, Introduction to American Popular Music, and History of Western Music.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. Decode and interpret musical notation and symbols through their instrument and/or voice.
2. Use basic musical notation in composition and performance.
3. Perform and stylistically interpret music on their applied instrument/voice in an ensemble and/or in a solo setting.
4. Discuss the scope, variety, structure, and form of works in the canon of traditional western art music orally and in writing.

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 109) or the University Preparation Pathway (p. 103) which include completion of the requirements below. Students who plan to transfer to a four-year school are strongly advised to meet with a member of the music faculty.

PROGRAM PREREQUISITES

MUST 101 [P] Music Fundamentals 1..... 3 OR

SATISFACTORY SCORE on music theory placement examination offered during the first meeting of MUST 121. Students who do not meet entrance proficiencies will be encouraged to enroll in MUST 101 prior to enrollment in MUST 121.

REQUIRED COURSES IN MUSIC THEORY- COMPLETE 20 UNITS

MUST 121 [1] Keyboard Skills 1	3
MUST 131 [1] Aural Skills 1	1
MUST 122 [2] Music Theory 2	3
MUST 132 [2] Aural Skills 2	1
MUST 123 [3] Music Theory 3	3
MUST 133 [3] Aural Skills 3	1
MUST 124 [4] Music Theory 4	3
MUST 134 [4] Aural Skills 4	1
MUST 141 [1] Musicianship and Guided Listing 1	1
MUST 142 [2] Musicianship and Guided Listing 2	1
MUST 143 [3] Musicianship and Guided Listing 3	1
MUST 144 [4] Musicianship and Guided Listing 4	1

ENSEMBLE-COMPLETE 4 UNITS

*Students whose primary instrument is woodwinds, brass, or percussion and who intend to participate in the Symphonic Band as their primary ensemble must enroll for a total of 8 units.

MUSE 145 [NP] Guitar Orchestra	1
MUSE 155 [NP] Concert Choir	1
MUSE 161 [NP] Community Orchestra	1
MUSE 165 [NP] String Orchestra	1
MUSE 175 [NP] Symphonic Band	1

APPLIED MUSIC - COMPLETE 4 UNITS

MUSA 124 [NP] Applied Piano	1
MUSA 145 [NP] Applied Classical Guitar	1
MUSA 153 [NP] Applied Vocal Repertoire 1	1

MUSA 154 [NP] Applied Vocal Repertoire 2.....	1
MUSA 163 [NP] Applied Music (Violin and Viola	1
MUSA 164 [NP] Applied Music (Cello and Bass.....	1
MUSA 173 [NP] Applied Music (Brass and Percussion	1
MUSA 183 [NP] Applied Music (Woodwinds	1

**Music majors will typically combine ensembles and applied studies according to their primary instrument/voice. Vocalists will enroll in Concert Choir and the appropriate applied voice course. Orchestral instrumentalists will enroll in Community Orchestra and the appropriate applied strings course. Band instrumentalists will enroll in Symphonic Band and/or Jazz Band and applied woodwinds or brass/percussion. Guitarists will enroll in Guitar Orchestra and the appropriate applied guitar class. Students are strongly advised to seek the advice of a music faculty member specializing in his/her primary instrument/voice when choosing ensemble and applied music courses.*

PIANO - COMPLETE 2 UNITS**

MUSA 121 [NP] Keyboard Skills 1.....	1
MUSA 122 [NP] Piano Enrichment	1
MUSA 123 [NP] Intermediate Piano.....	1
MUSA 124 [NP] Applied Piano	1

***Students whose primary instrument is piano may count their applied studies in piano toward this requirement.*

TOTAL UNITS IN A. A. MAJOR 30

RECOMMENDED MUSIC ELECTIVES

ENSEMBLE-COMplete 1 -2 UNITS

Any ensemble other than the student's primary ensemble. (Students are advised to seek the advice of a faculty member directing that ensemble to determine if he/she has the appropriate experience to succeed in the ensemble.)

APPLIED MUSIC- COMPLETE 1-2 UNITS

Any applied music course other than that in the student's primary instrument/voice. (Students are advised to seek the advice of a faculty member specializing in that instrument/voice to determine which level of course is appropriate.)

OTHER- COMPLETE 1-3 UNITS

MUSG 121 [NP] History of Western Music 1	3
MUSG 122 [NP] History of Western Music 2	3
MUSP 151 [NP] Musical Theatre Workshop	2
MUSP 153 [NP] Advanced Musical Theatre Workshop	2

TOTAL OPTIONAL MUSIC ELECTIVES..... 3-7

Natural Resources

PROGRAM

(209) 575-6200

CERTIFICATE OF ACHIEVEMENT: RECREATIONAL LAND MANAGEMENT

The Recreational Land Management program prepares students for a variety of career choices, such as park ranger, recreation facility manager, resource management, campground and landscape maintenance, conservationist, fishery worker, and more. The main focus of the program is on the management and development of land for recreation, and ecological purposes. Program courses include: Outdoor/Forest Recreation, Native Tree & Shrub Identification, Wildlife Production, Wildland Fire Control, etc.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. Practice safe work habits in an employment setting, including handling and storage of hazardous materials and operation of basic tools and equipment.
2. Apply forestry and land management skills for technical employment in the natural resource management.
3. Apply the principles of ecology, soil science, silviculture, cartography, and facilities maintenance and development to sustainable resources management problems.
4. Develop environmental stewardship as an operational philosophy for resource management, public education of natural resources, and wildlife management.

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 * [1] Introduction to Agricultural Education & Careers	1
AG 249 ** [4] Agriculture Internship	2 OR
AG 349ABCD [NP] Work Experience Agriculture - Supervised Practice	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 6 UNITS

AGEC 225 Agriculture Computer Applications	3
AGM 200 Introduction to Mechanical Technology	3
NR 200 Soils	4
PLSC 200 Introduction to Plant Science	3

III. MAJOR REQUIRED COURSES FOR CERTIFICATE - COMPLETE 10 UNITS

NR 215 Wildlife Production	3
NR 222 Native Tree and Shrub Identification	3
NR 230 Outdoor/Forest Recreation	3
NR 379 Wildland Fire Control	1

IV. ELECTIVE COURSES FOR CERTIFICATE - COMPLETE 3 UNITS

NR 220 Introductory Forestry	3
AG 285 Agricultural Communications	3
AGM 215 Machinery Management	3
AGM 230 Field Surveying	2
EHS 276 Landscape Maintenance	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT 24

**Required*

***Internship/Work Experience must be Agriculture related*

Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 349D, or a combination of AG 349A-C, or a combination of AG 249 and AG 349B.

Psychology

PROGRAM

(209) 575-6129

A.A.-T DEGREE: PSYCHOLOGY

This program is designed to prepare students who wish to transfer to a CSU and major in Psychology. This program will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Psychology. Courses such as general psychology, research methods in psychology, and introduction to neuroscience will enable the student to demonstrate ability to engage in critical thinking.

PROGRAM LEARNING OUTCOMES

- Upon satisfactory completion of this award, the student should be prepared to:
1. *Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.*
 2. *Understand and apply psychological principles to personal, social, and organizational issues.*
 3. *Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.*
 4. *Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.*

PROGRAM REQUIREMENTS

To receive an Associate of Arts for transfer degree in Psychology, the student must complete the requirements detailed in the Transfer Model Curriculum Pathway. All courses must be completed with a C or better or "P" (Pass).

REQUIRED : (10 UNITS)

MATH 134 [2] Elementary Statistics	4
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PSYCH 101 [1] General Psychology	3
PSYCH 102 [2] Research Methods.....	3

LIST A: SELECT ONE

BIO 101 [NP] Biological Principles	4 OR
BIO 111 [NP] General Biology	4 OR
BIO 116 [NP] Biology: A Human Perspective	4
PSYCH 103 [2] Introduction to Neuroscience	3

LIST B: SELECT ONE

PSYCH 104 [2] Introduction to Social Psychology	3
PSYCH 141 [2] Human Lifespan Development.....	3

LIST C: SELECT ONE

PSYCH 105 [2] Abnormal Psychology	3
PSYCH 110 [NP] Human Sexualities.....	3
PSYCH 111 [2] Psychology of Gender.....	3
PSYCH 118 [2] Pharmacology of Abused Substances.....	3
PSYCH 130 [NP] Personal Adjustment.....	3

TOTAL UNITS FOR THE A.A.-T MAJOR19-21

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	15-18
GENERAL EDUCATION (CSU GE OR IGETC) UNITS.....	37-39
ELECTIVE (CSU TRANSFERABLE) UNITS	17-20

TOTAL UNITS FOR A.A.-T DEGREE (MAXIMUM)..... 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for the Associate in Arts in Psychology for Transfer degree.*

Sociology

PROGRAM

(209) 575-6129

A.A.-T DEGREE: SOCIOLOGY

The Associate in Arts in Sociology for Transfer degree includes lower division coursework that is required for transfer. Sociology is the study of society and how individuals' lives are shaped by the larger social structure. The Associate in Arts in Sociology for transfer degree will provide foundational training for students in sociological concepts. The program offers a diverse curriculum to provide students with the tools necessary to comprehend their social world, using sociological theory and methodology to focus on social structure and culture. The program includes courses that explore social institutions, social problems, race, ethnic relations and the family.

The Associate in Arts in Sociology for Transfer degree is intended for students who plan to complete a bachelor's degree in Sociology at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or Sociology Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending

to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

The following is required for the Associate in Arts in Sociology for Transfer degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
 - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
 - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0.
- (3) All courses required for the major must be completed with a C or better or “P” (Pass).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award the student will be able to:

1. Critically evaluate and apply theoretical concepts to specific sociological phenomenon.
2. Explain major sociological theories and relevant concepts.

PROGRAM REQUIREMENTS

To earn an Associate in Arts in Sociology for Transfer Degree, the student must complete the requirements detailed in the Transfer Model Curriculum Pathway which include completion of the requirements below.

REQUIRED CORE - COMPLETE 10 UNITS

SOCIO 101 [1] Introduction to Sociology	3
SOCIO 102 [NP] Social Problems in the United States	3
MATH 134 [NP] Elementary Statistics	4

LIST A: SELECT TWO (6 UNITS)

SOCIO 125 [NP] Sociology of the Family	3
SOCIO 150 [NP] Ethnicity and Culture in America	3
PSYCH 104 [NP] Introduction to Social Psychology	3

LIST B: SELECT ONE (3 UNITS)

Any course from List A not already used	3
SOCIO 154 [NP] African-American Cultures and	3
SOCIO 156 [NP] Mexican Culture in the United States	3
ANTHR 102 [NP] Cultural Anthropology	3
SOCSC 105 [NP] Women’s Studies	3

TOTAL UNITS IN THE A.A.-T MAJOR 19

Total Units That May Be Double-Counted	12
General Education (CSU-GE Or IGETC Pattern Units)	37-39
Elective (CSU Transferable Units)	14-16

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

Welding PROGRAM (209) 575-6332

Certificate of Achievement: **Manufacturing Technology (Interdisciplinary)**

The Industrial Welding Program supports and maintains a training platform that focuses on the most common welding and sheet metal processes, certifications, and supporting technologies used in industry. The curriculum for the program is concentrated primarily on the Shielded Metal Arc, Gas Tungsten Arc, Gas Metal Arc, Flux Core Arc Welding, Oxy-Acetylene Welding, Oxy-Acetylene and Plasma Cutting. The program’s courses expose students to both hands-on, laboratory and lecture learning objectives.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. Perform the measuring and calculating of voltages, currents, and resistance in circuits and the wiring application of typical industrial equipment.
2. Perform typical machining, grinding, and threading operations within acceptable tolerances of general manufacturing procedures.
3. Demonstrate proper set-up of SMAW, GMAW, and GTAW equipment and perform typical welding procedures according to general manufacturing codes and standards.

PROGRAM REQUIREMENTS

To earn a certificate in this major, the student must complete the requirements below:

AGM 262 [NP] Hydraulics/Pneumatics	3
ELTEC 208 [NP] The World of Electricity and Electronics	3
ELTEC 229 [NP] Commercial & Industrial Wiring	3
ELTEC 265 [NP] Troubleshooting Techniques	1
MACH 301 [NP] Machine Shop 1	3
MACH 302 [NP] Machine Shop 2	3
WELD 200 [NP] Arc & Gas Welding	3
WELD 204 [NP] Gas Metal Arc Welding(G.M.A.W) & Flux Core Arc Welding (F.C.A.W) ...	3
WELD 206 [NP] Gas Tungsten Arc Welding (G.T.A.W.)	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 25