

Mineral Area College 2024-2026 Catalog Addendum

The information in this addendum is updated information to be added in our 2024-2026 college catalog.

We have updated our tuition and fees on page 26 of our current catalog. The tuition rates and fees starting fall 2025 are as follows:

Tuition Rates and Fees Starting Fall 2025 Term

Per credit hour rates	Base Tuition	Tier 1 Tuition *	Tier 2 Tuition^
In-district	\$162	\$187	\$217
Out-of-district	\$207	\$232	\$262
Out-of-state	\$259	\$284	\$314
International	\$271	\$296	\$326

*Tier 1 rate applies to Computer Science (CSC), Graphic Arts & Printing Technology (GRA), Radio & Television Broadcasting Technology (RTV).

^Tier 2 rate applies to Automotive Collision Technology (ACT), Air Heating and Refrigeration (AHR), Automotive Technology (AUT), Construction/Building Technology (CBT), Electrical Technology (ETT), Electrical/Electronics Technology (EEE), Manufacturing (MFG), Technology (TEC), Welding Technology (WLD), Health Related Technology (HLT), Paramedic Technology (PAR), Associate Degree Nursing (ADN) and Practical Nursing (PN) programs.

\$30/Credit Hour Student Support Fee

\$15/Credit Hour Web Support Fee for Web Classes

Posthumous Degrees

Effective fall 2024, immediate family members (parent, spouse, child, or sibling) may contact the Registrar's Office to request a degree be posthumously awarded within one year of the date of the student's passing. The awardee must have been enrolled in their final semester, must be successfully passing all of their currently enrolled classes, and must be in good standing with the college. Requests will be reviewed and approved by the college Registrar and Provost on a case-by-case basis.

New degree programs

Beginning in the fall 2025 semester, Mineral Area College will begin offering the following five new programs:

Associate of Fine Arts in Music

Associate of Applied Science

- Agriculture – Animal Science
- Agriculture – Agribusiness
- Agriculture – Agriculture Systems Technology
- Agriculture – Farm Management

Degree plans for each of these programs are included in this addendum and available on our website under Majors & Careers.

Course Descriptions

An updated list of active courses beginning in the fall 2025 semester is included in this addendum.

Course listings, offerings, and prerequisites are subject to change without notice. The course search option on MyMAC will give the most up-to-date information on courses offered each semester.

Updated 03/18/2025

ASSOCIATE OF FINE ARTS IN MUSIC DEGREE

(Major Code MU-AF) CIP 50.0901

ID#: _____ Student Name: _____ GPA: _____

College/University student will be transferring: _____

GENERAL EDUCATION REQUIREMENTS

COMMUNICATIONS

ENG1330 English Composition I (3)* [Written]
ENG1340 English Composition II (3)* [Written]
ENG1440 Public Speaking (3)* [Oral]

HUMANITIES

MSC1801 Appreciation of Music (3) [Required]
MSC1811 Appreciation of Jazz (3)
MSC1821 History & Form of Rock Music (3)

SOCIAL & BEHAVIORAL SCIENCES

PSY1130 General Psychology I (3)

CIVICS

HIS 0000 MO Higher Ed Civics Exam (0) [Required]
HIS1230 American History I (3)
HIS1240 American History II (3)
POS1180 American Political Systems (3)

MATH

MAT1240 Quantitative Reasoning (3) * [Preferred]
MAT1260 Elementary Statistics (3) * [Preferred for
Music Business]
MAT1270 PreCalculus: Algebraic Reasoning (3) *

BIOLOGICAL & PHYSICAL SCIENCES

BIO1100 Introduction to Biological Science (3)
BIO1430 Environmental Science (3)
PHS1040 Consumer Chemistry (3) *
PHS1200 Introduction to Astronomy (3)
PHS2420 Earth Science I (3) *

INSTITUTIONAL REQUIREMENTS

GUIDANCE

GUI1010 First Year Seminar (1)

PHYSICAL EDUCATION

PED2700 Wellness Center I (1)
PED2710 Wellness Center II (1) *
PED2780 Fit for Life (2)
PED2950 Wellness for the Individual (2)

The AFA in Music degree is designed for transfer to bachelor's degree programs, such as: Bachelor of Fine Arts (BFE) in Music, Bachelor of Music (BM), Bachelor of Arts (BA) in Music, Bachelor of Music Education (BME).

SEM/YR	COURSE#	COURSE TITLE	HRS
GENERAL EDUCATION REQUIREMENTS (27 HOURS)			
COMMUNICATIONS (9 hrs.)			
	ENG 1330	English Composition I	3
	ENG 1340	English Composition II	3
	ENG 1440	Public Speaking	3
HUMANITIES (6 hrs.) (see list to the left)			
	MSC 1801	Appreciation of Music	3
	MSC		3
SOCIAL & BEHAVIORAL SCIENCES (3 hrs.)			
	PSY 1130	General Psychology	3
CIVICS (3 hrs.) (see list on back)			
	HIS 0000	MO Higher Ed Civics Exam	0
			3
MATHEMATICS (3 hrs.) (see list to the left)			
	MAT		3
BIOLOGICAL & PHYSICAL SCIENCES (3 hrs.) (see list to the left)			
			3
INSTITUTIONAL REQUIREMENTS (3 HOURS)			
GUIDANCE required for all freshman (1 hr.)			
	GUI1010	First Year Seminar	1
PHYSICAL EDUCATION (2 hrs.) (see list to the left)			
CORE MUSIC REQUIREMENTS (26 HOURS)			
	MSC 1201	Music Theory I	3
	MSC 1202	Music Theory II	3
	MSC 2203	Music Theory III	3
	MSC 2204	Music Theory IV	3
	MSC 1101	Aural Skills I	1
	MSC 1102	Aural Skills II	1
	MSC 2103	Aural Skills III	1
	MSC 2104	Aural Skills IV	1
	MSC 1301	Piano Skills I	1
	MSC 1302	Piano Skills II	1
	MSC	Applied _____ I	1
	MSC 1400	Music Forum	0
	MSC	Applied _____ II	1
	MSC 1400	Music Forum	0
	MSC	Applied _____ III	1
	MSC 1400	Music Forum	0
	MSC	Applied _____ IV	1
	MSC 1400	Music Forum	0
	MSC	(Large Ensemble I)	1
	MSC	(Large Ensemble II)	1
	MSC	(Large Ensemble III)	1
	MSC	(Large Ensemble IV)	1

*Course has a prerequisite

MSC1201 Music Theory I (3)
MSC1202 Music Theory II (3) *
MSC2203 Music Theory III (3) *
MSC2204 Music Theory IV (3) *
MSC1101 Aural Skills I (1)
MSC1102 Aural Skills II (1) *
MSC2103 Aural Skills III (1) *
MSC2104 Aural Skills IV (1) *
MSC1301 Piano Skills I (1)
MSC1302 Piano Skills II (1) *
Applied Courses (Choose Specialty Area, Levels I-IV)
MSC1401 Applied Voice I (1)
MSC1411 Applied Piano I (1)
MSC1421 Applied Woodwinds I (1)
MSC1431 Applied Brass I (1)
MSC1441 Applied Percussion I (1)
MSC1451 Applied Guitar I (1)
MSC1461 Applied Bass I (1)
MSC1471 Applied Composition I (1) *
MSC1481 Applied Jazz I (1)
MSC1402 Applied Voice II (1) *
MSC1412 Applied Piano II (1) *
MSC1422 Applied Woodwinds II (1) *
MSC1432 Applied Brass II (1) *
MSC1442 Applied Percussion II (1) *
MSC1452 Applied Guitar II (1) *
MSC1462 Applied Bass II (1) *
MSC1472 Applied Composition II (1) *
MSC1482 Applied Jazz II (1) *
MSC2403 Applied Voice III (1) *
MSC2413 Applied Piano III (1) *
MSC2423 Applied Woodwinds III (1) *
MSC2433 Applied Brass III (1) *
MSC2443 Applied Percussion III (1) *
MSC2453 Applied Guitar III (1) *
MSC2463 Applied Bass III (1) *
MSC2483 Applied Jazz III (1) *
MSC2404 Applied Voice IV (1) *
MSC2414 Applied Piano IV (1) *
MSC2424 Applied Woodwinds IV (1) *
MSC2434 Applied Brass IV (1) *
MSC2444 Applied Percussion IV (1) *
MSC2454 Applied Guitar IV (1) *
MSC2464 Applied Bass IV (1) *
MSC2484 Applied Jazz IV (1) *
MSC2495 Special Topics: Applied Lesson I (1) *
MSC2496 Special Topics: Applied Lesson II (1) *
Large Ensembles (Choose Specialty Area, Levels I-IV)
MSC1001, 1002, 2003, 2004 Concert Band I-IV (1)
MSC1011, 1012, 2013, 2014 Jazz Ensemble I-IV (1)
MSC1021, 1022, 2023, 2024 Jazz Combo I-IV (1)
MSC1051, 1052, 2053, 2054 MAC Singers I-IV (1)
MSC1061, 1062, 2063, 2064 Chamber Singers I-IV (1)
MSC1071, 1072, 2073, 2074 MA Comm Singers I-IV (1)
MSC1081, 1082, 2083, 2084 Guitar Ensemble I-IV (1)

<p>Applied Courses in Non-Specialty Area (1)</p> <p>Large Ensembles in Non-Specialty Area (1)</p> <p>MSC1811 Appreciation of Jazz [if not in Humanities] (3)</p> <p>MSC1821 History & Form of Rock Music [if not in Humanities] (3)</p>

SEM/YR	COURSE#	COURSE TITLE	HRS
MUSIC ELECTIVES (9 HOURS)			
TOTAL HOURS TOWARDS AFA IN MUSIC DEGREE (65)			

1. An Application for Graduation form must be filed with the Registrar's Office by the end of the second week of the fall and spring semesters and by the end of the first week of the summer semester. Contact a navigator for assistance.
2. Earn a minimum institutional and cumulative career GPA of 2.0 or higher for graduation.
3. All applicants are required to complete 65 approved semester hours.
4. All degree-applicable courses, including electives, must be 1000 level or higher.
7. Fifteen (15) hours of Mineral Area College credit must be included in the degree.

Student ID #: _____ Student: _____

Communications – 2 courses

ENG1330 English Composition I +* (3) (written)
ENG1340 English Composition II * (3) (written)
ENG1440 Public Speaking * (3) (oral)
ENG1670 Interpersonal Communications I * (3) (oral)

Computer Literacy – 1 course

CIS 1730 Office Applications (2)
CIS 1750 Microcomputer Applications * (3)

History/Political Science – 1 course

HIS1230 American History I (3)
HIS1240 American History II (3)
POS1180 American Political Systems + (3)

Human Development – 1 course

PSY1130 General Psychology I + (3)
PSY1160 Applied Psychology * (3)
PSY1250 Human Growth & Development (3)
SOC1130 General Sociology (3)

Mathematics - 1 course

MGT1800 Business Math (3)
TEC 1900 Technical Math I (3)
TEC 1910 Technical Math II* (3)
MAT 1185 Fundamentals of Algebra* (4)
MAT 1240 Quantitative Reasoning* (3)
MAT 1260 Elementary Statistics * (3)
MAT 1270 Pre-Calc: Algebraic Reasoning * (3)
MAT 1370 PreCalc: Trig & Geom Reasoning * (3)

Science – 1 course

BIO 1100 Intro to Bio Science* (3)
BIO 1150 General Biology* (5)
BIO 1430 Environmental Science* (3)
BIO 2112 General Botany* (5)
BIO 2122 General Zoology* (5)
PHS 1040 Consumer Chemistry * (3)
PHS 1200 Introductory Astronomy *(3)
PHS 1250 Introductory Chemistry * (5)
PHS 1350 General Chemistry I * (5)
PHS 1400 Earth Science* (5)
PHS 2420 Earth Science I *(3)

Electives –

AGR 2400 Agriculture Mechanization (3)
AGR 2250 Agriculture Internship II (3)
BUS 2000 Principles of Accounting I (3)
BUS 2050 Principles of Accounting II (3)
BUS 2100 Fundamentals of Management (3)
BUS 2530 Legal Environment of Business (3)
BUS 2930 Principles of Macroeconomics (3)
BUS 2940 Principles of Microeconomics (3)
MGT 1590 Personal Finance * (3)
MGT 1710 Human Resources Management (3)
MGT 1800 Business Mathematics (3)
OST 1400 Business Communication I (3)
OST 2200 Introduction to Business (3)
TEC 1040 Technical Writing * (3)

+ Recommended course for transfer students.

* Course has a prerequisite. See MAC Catalog.

Gen Ed Cr. Hrs.....23-24
Major Cr. Hrs..... 32
Electives.....6-9
Total Cr. Hrs..... 61-65

NOTE: See graduation policies on back.

MINERAL AREA COLLEGE

ASSOCIATE OF APPLIED SCIENCE

**Agriculture-Animal Science
(Major Code AM-AP) CIP 01.0101**

Sem/Yr		Grade
_____	Agriculture Core	
_____	AGR 1130 Animal Science.....	4
_____	AGR 1220 Plant Science.....	4
_____	AGR 2320 Agriculture Economics.....	3
_____	AGR 1550 Livestock Production.....	3
_____	AGR 2520 Agriculture Genetics.....	3
_____	AGR 2420 Soil Science and Management.....	3
_____	AGR 2430 Soil Science Lab.....	1
_____	AGR 2310 Sustainable Ag. & Animal Welfare.....	3
_____	AGR 2120 Agriculture Data Analysis.....	1
_____	AGR 2210 Ag. Marketing, Finance, & Comm.....	3
_____	AGR 2220 Agriculture Internship.....	3
_____	PAW 1060 Prep for Employment.....	1
	Communications: (1 written & 1 oral)	
_____	_____.....	3
_____	_____.....	3
	Computer:	
_____	_____.....	2-3
	History/Political Science:	
_____	_____.....	3
	Human Development:	
_____	_____.....	3
	Mathematics:	
_____	_____.....	3
	Science:	
_____	_____.....	5
	Electives:	
_____	_____.....	6-9
GUI1010	First Year Seminar.....	1
HIS0000	MO Higher Education Civics Exam.....	0

Total Credit Hours 61-65

GRADUATION POLICIES:

1. An Application for Graduation form must be filed with the Registrar's Office by the end of the second week of the fall and spring terms and by the end of the first week of the summer term. Contact navigator for assistance.
2. Earn a minimum institutional and cumulative career GPA of 2.0 or higher for graduation.
3. Career and Technical degree candidates (Associate of Applied Science, Associate of Science, and Certificate completers) are required to complete a graduation interview form in the Career Services Office or in MyMAC.
4. Fifteen (15) hours of Mineral Area College credit must be included in the degree.

Signature Required
Acknowledgment of Graduation Policies

Date

GPA: _____

Navigator: _____

Student ID #: _____ Student: _____

Communications – 2 courses

ENG1330 English Composition I +* (3) (written)
ENG1340 English Composition II * (3) (written)
ENG1440 Public Speaking * (3) (oral)
ENG1670 Interpersonal Communications I * (3) (oral)

Computer Literacy – 1 course

CIS 1730 Office Applications (2)
CIS 1750 Microcomputer Applications * (3)

History/Political Science – 1 course

HIS1230 American History I (3)
HIS1240 American History II (3)
POS1180 American Political Systems + (3)

Human Development – 1 course

PSY1130 General Psychology I + (3)
PSY1160 Applied Psychology * (3)
PSY1250 Human Growth & Development (3)
SOC1130 General Sociology (3)

Mathematics - 1 course

MGT1800 Business Math (3)
TEC 1900 Technical Math I (3)
TEC 1910 Technical Math II* (3)
MAT 1185 Fundamentals of Algebra* (4)
MAT 1240 Quantitative Reasoning* (3)
MAT 1260 Elementary Statistics * (3)
MAT 1270 Pre-Calc: Algebraic Reasoning * (3)
MAT 1370 PreCalc: Trig & Geom Reasoning * (3)

Science – 1 course

BIO 1100 Intro to Bio Science *(3)
BIO 1150 General Biology* (5)
BIO 1430 Environmental Science* (3)
BIO 2112 General Botany* (5)
BIO 2122 General Zoology* (5)
PHS 1040 Consumer Chemistry * (3)
PHS 1200 Introductory Astronomy (3)
PHS 1250 Introductory Chemistry * (5)
PHS 1350 General Chemistry I * (5)
PHS 1400 Earth Science* (5)
PHS 2420 Earth Science I* (3)

Electives –

AGR 1130 Animal Science (3)
AGR 2120 Agriculture Data Analysis (3)
AGR 2400 Agriculture Mechanization (3)
AGR 2520 Agriculture Genetics (3)
BUS 2000 Principles of Accounting I (3)
BUS 2050 Principles of Accounting II (3)
BUS 2530 Legal Environment of Business (3)
BUS 2930 Principles of Macroeconomics (3)
BUS 2940 Principles of Microeconomics (3)
MGT 1590 Personal Finance * (3)
MGT 1710 Human Resources Management (3)
MGT 1800 Business Mathematics (3)
OST 1400 Business Communication I (3)
OST 2200 Introduction to Business (3)
TEC 1040 Technical Writing * (3)
AGR 2250 Agriculture Internship II (3)

+ Recommended course for transfer students.
* Course has a prerequisite. See MAC Catalog.

Gen Ed Cr. Hrs.....23-24
Major Cr. Hrs..... 27
Elective Credit.....12
Total Cr. Hrs..... 62-63

NOTE: See graduation policies on back.

MINERAL AREA COLLEGE

ASSOCIATE OF APPLIED SCIENCE

**Agriculture-Agribusiness
(Major Code AA-AP) CIP 01.0101**

Sem/Yr		Grade
	Agriculture Core	
_____	AGR 1220 Plant Science.....	4 _____
_____	AGR 2320 Agriculture Economics	3 _____
_____	AGR 1550 Livestock Production.....	3 _____
_____	BUS 2100 Fundamentals of Management.....	3 _____
_____	AGR 2120 Agriculture Data Analysis.....	1 _____
_____	AGR 2420 Soil Science and Management	3 _____
_____	AGR 2310 Sustainable Ag. & Animal Welfare	3 _____
_____	AGR 2210 Ag. Marketing, Finance, & Comm.	3 _____
_____	AGR 2220 Agriculture Internship	3 _____
_____	PAW 1060 Prep for Employment	1 _____
	Communications: (1 written & 1 oral)	
_____	_____	3 _____
_____	_____	3 _____
	Computer:	
_____	_____	2-3 _____
	History/Political Science:	
_____	_____	3 _____
	Human Development:	
_____	_____	3 _____
	Mathematics:	
_____	_____	3 _____
	Science:	
_____	_____	5 _____
	Electives:	
_____	_____	12 _____
GUI1010	First Year Seminar.....	1 _____
HIS0000	MO Higher Education Civics Exam	0 _____

Total Credit Hours 62-63

GRADUATION POLICIES:

1. An Application for Graduation form must be filed with the Registrar's Office by the end of the second week of the fall and spring terms and by the end of the first week of the summer term. Contact navigator for assistance.
2. Earn a minimum institutional and cumulative career GPA of 2.0 or higher for graduation.
3. Career and Technical degree candidates (Associate of Applied Science, Associate of Science, and Certificate completers) are required to complete a graduation interview form in the Career Services Office or in MyMAC.
4. Fifteen (15) hours of Mineral Area College credit must be included in the degree.

Signature Required
Acknowledgment of Graduation Policies

Date

GPA: _____

Navigator: _____

Student ID #: _____ Student: _____

Communications – 2 courses

ENG1330 English Composition I +* (3) (written)
ENG1340 English Composition II * (3) (written)
ENG1440 Public Speaking * (3) (oral)
ENG1670 Interpersonal Communications I * (3) (oral)

Computer Literacy – 1 course

CIS 1730 Office Applications (2)
CIS 1750 Microcomputer Applications * (3)

History/Political Science – 1 course

HIS1230 American History I (3)
HIS1240 American History II (3)
POS1180 American Political Systems + (3)

Human Development – 1 course

PSY1130 General Psychology I + (3)
PSY1160 Applied Psychology * (3)
PSY1250 Human Growth & Development (3)
SOC1130 General Sociology (3)

Mathematics - 1 course

MGT1800 Business Math (3)
TEC 1900 Technical Math I (3)
TEC 1910 Technical Math II* (3)
MAT 1185 Fundamentals of Algebra* (4)
MAT 1240 Quantitative Reasoning* (3)
MAT 1260 Elementary Statistics * (3)
MAT 1270 Pre-Calc: Algebraic Reasoning * (3)
MAT 1370 PreCalc: Trig & Geom Reasoning * (3)

Science – 1 course

BIO 1100 Intro to Bio Science* (3)
BIO 1150 General Biology* (5)
BIO 1430 Environmental Science* (3)
BIO 2112 General Botany* (5)
BIO 2122 General Zoology* (5)
PHS 1040 Consumer Chemistry * (3)
PHS 1200 Introductory Astronomy* (3)
PHS 1250 Introductory Chemistry * (5)
PHS 1350 General Chemistry I * (5)
PHS 1400 Earth Science* (5)
PHS 2420 Earth Science I *(3)

Electives –

AGR 1130 Animal Science + (3)
AGR 1550 Livestock Production + (3)
AGR 2520 Agriculture Genetics + (3)
AGR 2430 Soil Science Lab + (1)
AGR 2250 Agriculture Internship II (3)
BUS 2000 Principles of Accounting I (3)
BUS 2050 Principles of Accounting II (3)
BUS 2100 Fundamentals of Management (3)
BUS 2530 Legal Environment of Business (3)
BUS 2930 Principles of Macroeconomics (3)
BUS 2940 Principles of Microeconomics (3)
MGT 1590 Personal Finance * (3)
MGT 1710 Human Resources Management (3)
MGT 1800 Business Mathematics (3)
OST 1400 Business Communication I (3)
OST 2200 Introduction to Business (3)
TEC 1040 Technical Writing * (3)

+ Recommended course for transfer students.
* Course has a prerequisite. See MAC Catalog.

Gen Ed Cr. Hrs.....23-24
Major Cr. Hrs.....36
Elective Cr. Hrs.....3-6
Total Cr. Hrs.....62-66

NOTE: See graduation policies on back.

MINERAL AREA COLLEGE

ASSOCIATE OF APPLIED SCIENCE
Agriculture-Agriculture Systems Technology
(Major Code AR-AP) CIP 01.0101

Sem/Yr		Grade
	Agriculture Core	
_____	AGR 1220 Plant Science	4 _____
_____	AGR 2320 Agriculture Economics	3 _____
_____	AGR 1150 Introduction to Ag. Mechanics	3 _____
_____	AGR 2420 Soil Science and Management	3 _____
_____	AGR 2400 Agriculture Mechanization	3 _____
_____	AGR 2310 Sustainable Ag. & Animal Welfare	3 _____
_____	AGR 2120 Agriculture Data Analysis	1 _____
_____	AGR 2210 Ag. Marketing, Finance, & Comm.	3 _____
_____	TEC 1415 Industrial Maintenance Technology.	3 _____
_____	TEC 1425 Elements of Automation	3 _____
_____	TEC 2030 Basic Fluid Power	3 _____
_____	AGR 2220 Agriculture Internship	3 _____
_____	PAW 1060 Prep for Employment	1 _____
	Communications: (1 written & 1 oral)	
_____	_____	3 _____
_____	_____	3 _____
	Computer:	
_____	_____	2-3 _____
	History/Political Science:	
_____	_____	3 _____
	Human Development:	
_____	_____	3 _____
	Mathematics:	
_____	_____	3 _____
	Science:	
_____	_____	5 _____
	Electives:	
_____	_____	3-6 _____
GUI1010	First Year Seminar	1 _____
HIS0000	MO Higher Education Civics Exam	0 _____

Total Credit Hours 62-66

GRADUATION POLICIES:

1. An Application for Graduation form must be filed with the Registrar's Office by the end of the second week of the fall and spring terms and by the end of the first week of the summer term. Contact navigator for assistance.
2. Earn a minimum institutional and cumulative career GPA of 2.0 or higher for graduation.
3. Career and Technical degree candidates (Associate of Applied Science, Associate of Science, and Certificate completers) are required to complete a graduation interview form in the Career Services Office or in MyMAC.
4. Fifteen (15) hours of Mineral Area College credit must be included in the degree.

Signature Required
Acknowledgment of Graduation Policies

Date

GPA: _____

Navigator: _____

Student ID #: _____ Student: _____

Communications – 2 courses

ENG1330 English Composition I +* (3) (written)
ENG1340 English Composition II * (3) (written)
ENG1440 Public Speaking * (3) (oral)
ENG1670 Interpersonal Communications I * (3) (oral)

Computer Literacy – 1 course

CIS 1730 Office Applications (2)
CIS 1750 Microcomputer Applications * (3)

History/Political Science – 1 course

HIS1230 American History I (3)
HIS1240 American History II (3)
POS1180 American Political Systems + (3)

Human Development – 1 course

PSY1130 General Psychology I + (3)
PSY1160 Applied Psychology * (3)
PSY1250 Human Growth & Development (3)
SOC1130 General Sociology (3)

Mathematics - 1 course

MGT1800 Business Math (3)
TEC 1900 Technical Math I (3)
TEC 1910 Technical Math II* (3)
MAT 1185 Fundamentals of Algebra* (4)
MAT 1240 Quantitative Reasoning* (3)
MAT 1260 Elementary Statistics * (3)
MAT 1270 Pre-Calc: Algebraic Reasoning * (3)
MAT 1370 PreCalc: Trig & Geom Reasoning * (3)

Science – 1 course

BIO 1100 Intro to Bio Science* (3)
BIO 1150 General Biology* (5)
BIO 1430 Environmental Science* (3)
BIO 2112 General Botany* (5)
BIO 2122 General Zoology* (5)
PHS 1040 Consumer Chemistry * (3)
PHS 1200 Introductory Astronomy (3)
PHS 1250 Introductory Chemistry * (5)
PHS 1350 General Chemistry I * (5)
PHS 1400 Earth Science *(5)
PHS 2420 Earth Science I* (3)

Electives –

AGR 2400 Agriculture Mechanization (3)
AGR 2430 Soil Science Lab + (1)
AGR 2250 Agriculture Internship II (3)
BUS 2000 Principles of Accounting I (3)
BUS 2050 Principles of Accounting II (3)
BUS 2100 Fundamentals of Management (3)
BUS 2530 Legal Environment of Business (3)
BUS 2930 Principles of Macroeconomics (3)
BUS 2940 Principles of Microeconomics (3)
MGT 1590 Personal Finance * (3)
MGT 1710 Human Resources Management (3)
MGT 1800 Business Mathematics (3)
OST 1400 Business Communication I (3)
OST 2200 Introduction to Business (3)
TEC 1040 Technical Writing * (3)

+ Recommended course for transfer students.
* Course has a prerequisite. See MAC Catalog.

Gen Ed Cr. Hrs.....23-24
Major Cr. Hrs.....34
Elective Cr.Hrs.....3-6
Total Cr. Hrs.....60-64

NOTE: See graduation policies on back.

MINERAL AREA COLLEGE

ASSOCIATE OF APPLIED SCIENCE

**Agriculture-Farm Management
(Major Code AF-AP) CIP 01.0101**

Sem/Yr		Grade
	Agriculture Core	
_____	AGR 1130 Animal Science.....	4 _____
_____	AGR 1220 Plant Science.....	4 _____
_____	AGR 2320 Agriculture Economics.....	3 _____
_____	AGR 1550 Livestock Production.....	3 _____
_____	AGR 2520 Agriculture Genetics.....	3 _____
_____	AGR 2420 Soil Science and Management	3 _____
_____	AGR 2400 Agriculture Mechanization	3 _____
_____	AGR 2310 Sustainable Ag. & Animal Welfare.....	3 _____
_____	AGR 2120 Agriculture Data Analysis.....	1 _____
_____	AGR 2210 Ag. Marketing, Finance, & Comm.....	3 _____
_____	AGR 2220 Agriculture Internship	3 _____
_____	PAW 1060 Prep for Employment	1 _____
	Communications: (1 written & 1 oral)	
_____	_____.....	3 _____
_____	_____.....	3 _____
	Computer:	
_____	_____.....	2-3 _____
	History/Political Science:	
_____	_____.....	3 _____
	Human Development:	
_____	_____.....	3 _____
	Mathematics:	
_____	_____.....	3 _____
	Science:	
_____	_____.....	5 _____
	Electives:	
_____	_____.....	3-6 _____
GUI1010	First Year Seminar.....	1 _____
HIS0000	MO Higher Education Civics Exam	0 _____

Total Credit Hours 60-64

GRADUATION POLICIES:

1. An Application for Graduation form must be filed with the Registrar's Office by the end of the second week of the fall and spring terms and by the end of the first week of the summer term. Contact navigator for assistance.
2. Earn a minimum institutional and cumulative career GPA of 2.0 or higher for graduation.
3. Career and Technical degree candidates (Associate of Applied Science, Associate of Science, and Certificate completers) are required to complete a graduation interview form in the Career Services Office or in MyMAC.
4. Fifteen (15) hours of Mineral Area College credit must be included in the degree.

Signature Required
Acknowledgment of Graduation Policies

Date

GPA: _____

Navigator: _____

Course Descriptions

Academic Courses

ART	Art
BHS	Behavioral Health Support
BIO	Biological Science
BUS	Business Admin & Economics
CIS	Computer Info Systems
COM	Communications
CSC	Computer Science
EDU	Education
ENG	English
GEO	Geography
GUI	Guidance
HIS	History
MAT	Mathematics
MFL	Modern Foreign Language
MSC	Music
PED	Physical Education
PHI	Philosophy
PHS	Physical Science
PHY	Physiology & Health
POS	Political Science
PSY	Psychology
RDG	Reading
SOC	Sociology
SWK	Social Work
THE	Theatre

The letters in the course abbreviations indicate subject areas. The courses are listed in alphabetical order by subject area prefix.

So that students may plan ahead, the semester in which some courses are normally offered has been indicated after the course title or at the end of the course description. If no semesters are indicated, the course is normally offered during the regular academic year. A course description stating “offered on demand” means these classes will not be offered for one or two students; there must be sufficient interest to warrant a class on a regular schedule.

Students should contact the appropriate Division Chair for a projected schedule of their course offerings. Please check the prerequisites for all courses. Courses in this catalog are subject to change without notice.

Career & Technical Courses

AAI	Animal Assisted Intervention
ADN	Associate Degree Nursing
AGR	Agriculture
AHR	Air, Heating, & Refrigeration
AUT	Automotive Technology
CBT	Construction Building Technology
CIS	Computer Info Systems
CRJ	Criminal Justice
ECE	Early Childhood Education
EEE	Electrical/Electronics Technology
ETT	Electrical Technology
FOT	Fiber Optic
HLT	Health Related Technology
MGT	Management
MLT	Medical Laboratory Technician
NUR	Practical Nursing
OST	Office Systems Technology
PAR	Paramedic Technology
PAW	Personal Awareness
PTA	Physical Therapist Assistant
TEC	Technology
WLD	Welding Technology

Lecture/Laboratory Hours

Parenthesis indicate the number of clock hours a course meets each week throughout the semester. For example, “3-2” indicates a course meets three lecture hours and two lab hours per week.

Honors

Readings in Honors and Research in Honors may be offered by a department. Consult the honors director for current offerings.

Course Levels

0000-0990 — Developmental courses (Do not apply to a degree.)

1000-2990 — Freshman/Sophomore level courses

ANIMAL ASSISTED INTERVENTION

AAI1600 (3 - 0) 3 cr. hrs.

History of Animal Assisted Therapy

Co-requisite: AAI1800 and AGR1130 with a minimum grade of C, or concurrent enrollment; AND must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Addresses the history and evolution of animal assisted therapy interventions. The course will allow participants to apply founding principles of animal assisted therapy into their future work in this field.

AAI1800 (3 - 0) 3 cr. hrs.

Intro to Equine-Assisted Therapy

Co-requisite: AAI1600 with a minimum grade of C, or concurrent enrollment; AND must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Provides an introduction to equine-assisted therapy. The course will explore the various forms of equine-assisted therapy, including equine-facilitated learning, equine-facilitated psychotherapy, and hippotherapy/therapeutic riding.

AAI2500 (3 - 0) 3 cr. hrs.

Animal-Assisted Therapy Practicum I

Prerequisite: AAI1600 and AAI1800 with a minimum grade of C; AND AGR2310 with a minimum grade of C, or concurrent enrollment. Allows for students to gain hands-on experience through a site of their choosing to complete 150 hours over the course of a semester. Students will become familiar with the structure, function, and day-to-day operations of an animal-assisted therapy program. Students will apply concepts from their course work at their field site. The site may have additional requirements for students.

AAI2600 (3 - 0) 3 cr. hrs.

Ethics of Animal-Assisted Intervent

Prerequisite: AAI1600 and AAI1800 with a minimum grade of C; AND AAI2500 with a minimum grade of C, or concurrent enrollment. Highlights important factors involving animals in therapeutic settings. This course will complement animal welfare agriculture course. The course will involve conversation surrounding animal consent and choice in therapeutic practice.

ASSOCIATE DEGREE NURSING

ADN1001 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator. Offers students who have experienced academic challenges, and/or withdrawn from a prior semester, the opportunity to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. Designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. Must attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams, but is not required to attend clinical rotations. Syllabus will be individualized for each student based on needs and instructor recommendation. Evaluation will be pass/fail, based on the nursing program grading scale.

ADN1002 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator. Offers students who have experienced academic challenges, and/or have withdrawn from a prior semester, the opportunity to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. Designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. Must attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams, but is not required to attend clinical rotations. Syllabus will be individualized for each student based on needs and instructor recommendation. Evaluation will be pass/fail, based on the nursing program grading scale.

ADN1003 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator. This course allows students who have experienced academic challenges and/or have withdrawn from a prior semester to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. This course is designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. The student is to attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams. The student does not attend clinical rotations. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course evaluation will be pass/fail, based on the nursing program grading scale.

ADN1004 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the

Director of Allied Health and program coordinator.

This course allows students who have experienced academic challenges and/or have withdrawn from a prior semester to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. This course is designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. The student is to attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams. The student does not attend clinical rotations. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course evaluation will be pass/fail, based on the nursing program grading scale.

ADN1420 (Arr - Arr) 3 cr. hrs.

LPN-ADN Transition (Bridge) (Summer, Fall)

Prerequisites: Valid LPN license and acceptance into Advanced Placement Program. Addresses the transition in the roles from LPN to RN with comparisons and differences in responsibility and accountability to the patients. Other topics addressed in the course include therapeutic communications, nursing process, nursing diagnosis, physical assessment skills, drug calculation review, aspects of critical thinking, and roles of the RN under the Nurse Practice Act. Assignments include case studies for developing nursing diagnoses, completing a health history assessment and demonstrating physical assessment skills by performing a head to toe assessment.

ADN1450 (Arr - Arr) 6 cr. hrs.

Fundamentals of Nursing

Prerequisite: Acceptance into the ADN Program. Designed to enable beginning nursing students to synthesize the many complex physiologic and psychosocial concepts that support comprehensive nursing care. Nursing skills are presented in the order in which they are likely to be encountered in the health care setting. Skills labs and simulations are conducted prior to clinicals. Clinical hours are scheduled weekly in the last half of the semester.

ADN1460 (Arr - Arr) 4 cr. hrs.

Maternity Nursing

Prerequisites: Sequential nursing and science classes with a minimum grade of C. Provides instruction and clinical practice in meeting the physiologic, psychologic and adaptation of the mother and family to pregnancy. Emphasis is on the normal with deviations from the normal. Applications of knowledge in normal growth and development, normal nutrition, and medications in integrated obstetrical care centers, clinics, and obstetricians' offices are utilized. Eight clinical hours are scheduled weekly in the last half of the term.

ADN1480 (1 - 0) 1 cr. hrs.

Contemporary Nursing

Prerequisites: Sequential nursing and science classes with a minimum grade of C.

Designed to give the nursing student an overall view of the nursing profession from historical events that influenced nursing to the present day image, as well as the legal, ethical, political and on-the-job issues confronting today's nurse. Communication in the workplace, time management, writing an effective resume, developing a professional portfolio, interviewing tips, employee benefits and self-care strategies will be addressed. Student presentations and group discussions will help the transition from nursing student to effective entry-level nursing practice.

ADN1495 (Arr - Arr) 6 cr. hrs.

Medical Surgical Nursing I

Prerequisite: Sequential nursing and science classes with a minimum grade of C. Focuses on concepts relating to the assessment and care of the adult in the acute care setting with commonly occurring medical-surgical diagnoses and disorders, including peripheral intravenous access and intravenous infusion of fluids and medications. Emphasis is on the implementation of the nursing process and the development of competent assessment skills by applying principles from the biological, physical, social, behavioral, medical, and nursing sciences.

ADN1505 (Arr - Arr) 5 cr. hrs.

Medical Surgical Nursing II

Prerequisite: Sequential nursing and science classes with a minimum grade of C. Continuation of Med/Surg I. Emphasis is placed on the management of increasingly complex diagnoses and disorders primarily in the surgical, acutely ill, and emergently ill clients. Focus on medication administration of increasingly complex medications, including the intravenous route.

ADN1512 (3 - 0) 3 cr. hrs.

Clinical Pharmacology

Prerequisites: Sequential nursing and science courses with a minimum grade of C. Designed to introduce the student to common characteristics of various drug classifications and a prototype drug within the group. Presents relevant information about current medications by showing the reasoning behind the ways in which drugs of different classes are used in treating patients with various disorders. Emphasis is on drugs of the autonomic nervous system, cardiovascular system, respiratory system, and the central nervous system.

ADN1515 (Arr - Arr) 5 cr. hrs.

Medical Surgical Nursing III

Prerequisite: Sequential nursing and science classes with a minimum grade of C. Continuation of Med/Surg I & II. Focuses on managing the care of the emergently ill client as well as those with reproductive, hepatic, and immune dysfunction. There is a strong emphasis on leadership and delegation to licensed and unlicensed assistive personnel. In addition, prioritization of care and management of multiple clients is incorporated.

ADN1572 (3 - 0) 3 cr. hrs.

Basic Pharmacology

Prerequisite: Acceptance into the ADN Program. Corequisite: ADN1450 Fundamentals of Nursing. An overview and introduction to the administration of medicine. Basic information concerning the various pharmaceutical names and preparations, their administration techniques and nursing implications will be given. Emphasis in the class is upon calculations used in the administration of medicine. Medication practicum required prior to clinicals.

ADN1610 (Arr - Arr) 5 cr. hrs.

Nursing of Children

Prerequisites: Sequential nursing and science courses, and PSY1250 with a minimum grade of C. Designed to provide instruction and clinical practice in meeting the needs of the child and family from infancy through adolescence. Principles and theories of child development as well as culture, experience and nutritional influences are integrated. Focus is placed on acute and chronic illness, hospitalization effects, congenital abnormalities, and nursing care specific to particular age groups and health problems.

ADN1630 (Arr - Arr) 4 cr. hrs.

Mental Health Nursing

Prerequisites: Sequential nursing and science classes with a minimum grade of C. Designed to introduce the student to history and trends in psychiatric nursing, major psychiatric theoretical models, the five axes of the psychiatric classification system, the major psychiatric illnesses inclusive of definitions, clinical manifestations, psychopharmacology, medical treatments, nursing interventions and milieu management. Intended to provide fundamental knowledge of mental health concepts and interactional techniques for the beginning nurse. The role that emotions and stress play in the behavior of the client and client's family are emphasized to give the student a better understanding of behavior and provide a useful framework for planning and providing nursing care in any health care setting. Hospital-based and community-based mental health clinical experience is included.

ADN1640 (3 - 0) 3 cr. hrs.

Therapeutic Nutrition

Prerequisites: Sequential nursing and science classes with a minimum grade of C. Provides students with the basic foundation of nutrition and adaptation of diets to meet individual needs. Included are nutrients and dietary sources necessary for maintaining good health, and alterations required in diets of individuals who have specific disease processes.

AGRICULTURE

AGR1130 (4 - 0) 4 cr. hrs.

Animal Science

Study fundamental principles related to animal science agriculture. Students cover topics such as animal agriculture production, animal

byproducts, animal husbandry, animal breeding, and the anatomy, physiology, genetics, and diseases of common livestock species.

AGR1150 (3 - 0) 3 cr. hrs.

Intro to Agricultural Mechanics

Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. A survey course designed to provide primary skills and knowledge required for successful operation of technical and mechanical systems in an agricultural setting.

AGR1220 (4 - 0) 4 cr. hrs.

Plant Science

A comprehensive introduction to plant science covering plant physiology, biochemistry, and genetics and the major environmental factors that affect plants. Manipulation of plants by various techniques of propagation, both sexual and asexual, including various grafting methods are introduced. A brief overview of major world crops and their contributions to our need for food and fiber is provided.

AGR1550 (3 - 0) 3 cr. hrs.

Livestock Production

Designed to develop skills necessary to successfully manage a livestock enterprise. Emphasis will be placed on selection, reproduction, housing, and environment management. Breeds and enterprise selection and the economics of beef, dairy, swine, sheep and goats are covered. Basic management of equine and poultry facilities and operations is included.

AGR2120 (1 - 0) 1 cr. hrs.

Agriculture Data Analysis

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Introduction to spreadsheet operations for data manipulation, statistical analysis, and data visualization for students in agriculture.

AGR2210 (3 - 0) 3 cr. hrs.

Agri Marketing, Finance & Communica

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT

reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.

Treatment of the most important issues related to marketing agricultural products, methods of communication, and issues impacting financial aspects of agricultural operations.

AGR2220 (3 - 0) 3 cr. hrs.

Agriculture Internship

Prerequisite: Instructor approval.
Supervised on-the-job training in student-selected agriculture business/industry coordinated by the college. Student will spend 120 clock hours at internship site. A training plan will be written for each student. Every effort will be made for periodic visits by the instructor for conference with the student and employer.

AGR2250 (Arr - Arr) 3 cr. hrs.

Agriculture Internship II

Prerequisite: AGR 2220 with a minimum grade of C.
Supervised on-the-job training in selected agricultural business and industry coordinated by the college. Student will spend 90 clock hours at a internship site. Periodic visits may be made by instructor for conferences with the student and employer.

AGR2310 (3 - 0) 3 cr. hrs.

Sustainable Agri & Animal Welfare

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.

Addresses the need in the agriculture industry to adopt best practices to ensure low impact to the environment related to agricultural practices and the paradigm shift of improving animal welfare to improve quality of products.

AGR2320 (3 - 0) 3 cr. hrs.

Agriculture Economics

Deals with how producers, consumers, and societies use scarce resources in the production, processing, marketing, and consumption of food and fiber products. Students will study basic economic concepts with applications to agriculture.

AGR2400 (3 - 0) 3 cr. hrs.

Agriculture Mechanization

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation

reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Focuses on identifying safe practices, troubleshooting, and project management of agricultural projects requiring the use of agriculture equipment.

AGR2420 (3 - 0) 3 cr. hrs.

Soil Science & Management

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Designed to develop an understanding of the basics of soil development, classifications, management, fertility, testing, and origins as related to plant growth. Practical application of soil science principles and soil management is stressed.

AGR2430 (0 - 1) 1 cr. hrs.

Soil Science & Management Lab

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
A one (1) hour optional lab provides further application of key concepts, and is recommended for students transferring into programs of study emphasizing agronomy, natural resources management, or other related agricultural sciences.

AGR2520 (3 - 0) 3 cr. hrs.

Agricultural Genetics

Basic principles of inheritance in plants and animals of agricultural significance. Transmission genetics and its effects on the usefulness of plants and animals. Basic principles of plant and animal improvement.

AIR COND, HEATING, REFRIG

AHR1000 (3 - 0) 3 cr. hrs.

Safety For Heating/AC/Refig Prof

Learn to be safe HVACR technicians and installers by being aware of work hazards, correct procedures, protective equipment, and the proper use of tools in the trade. Learning will include classroom lecture, hands-on lab projects, and opportunity for CPR and First Aid certification.

AHR1005 (2 - 1) 3 cr. hrs.

Refrigeration System Fundamentals

Introduces students to refrigerants, the components and functions of the refrigerant system, the relationship between temperatures and pressures, and basic thermodynamic principles. Learning will include classroom lectures and hands-on projects.

AHR1010 (3 - 0) 3 cr. hrs.

Air Conditioning & Refrigeration I

Prerequisite: AHR1000 with a minimum grade of C.
Learn basic thermodynamic principles including how heat is transferred, calculating the amount of heat added or removed to a substance, and identifying substances states. Electric and fossil fuel heating sources as well as an introduction to refrigerants. Learning will involve classroom and hands-on instruction.

AHR1015 (2 - 1) 3 cr. hrs.

Electric for HVAC/R

Understand the basic principles of electricity and how it pertains to the HVAC industry.

AHR1016 (3 - 0) 3 cr. hrs.

Thermal and Environmental Science

Environmental applications course applies the knowledge of the principles and theories of thermal systems incorporating it with real world applications such as heating and cooling systems, system performance, insulation, and humidity. Students will gain a better understanding of how these items, which are a part of everyday life, can be modified to improve human comfort conditions. Students will learn to calculate the efficiency of a thermal system. Students will become familiar with heat loads and how they affect system components. Students will learn to use insulation to improve efficiency and learn how psychometrics is vital to conditions inside buildings.

AHR1030 (3 - 0) 3 cr. hrs.

Air Conditioning & Refrigeration II

Prerequisite: AHR1000 and AHR 1010 with a minimum grade of C.
Learn proper, safe refrigerant handling and the components that make up the refrigerant system. Allows the opportunity to obtain EPA Section 608 certifications for refrigerant handling in any low and high pressure systems. Learning will include classroom and hands-on lab instruction.

AHR1100 (0 - 0) 3 cr. hrs.

Basic Braising Heat/Ref/AC

Prerequisite: AHR1000 with a minimum grade of C.
Learn proper cutting, threading, braising, and soldering techniques along with selecting and sizing the proper piping for different gasses including refrigerants. There will be classroom instruction as well as lab projects.

AHR1105 (2 - 1) 3 cr. hrs.

Refrigerant Management

Prerequisite: AHR1005 with a minimum grade of C.
Learn proper refrigerant handling procedures and have the opportunity to earn their EPA Section 608 certification.

AHR1115 (2 - 1) 3 cr. hrs.

HVAC/R Motors and Controls

Prerequisite: AHR1015 with a minimum grade of C.
Students, with the basic principles of electricity, will learn how motors and controls are applied in the HVAC industry and how to troubleshoot them.

AHR1130 (3 - 0) 3 cr. hrs.

Basic Electricity for Htg/Ref/AC

Prerequisite: AHR1000 with a minimum grade of C.
Study of electrical wiring diagrams and proper troubleshooting for the HVAC industry. Topics included are: electrical symbols, Ohms law, series and parallel circuits, power distribution, and AC current transformers used in the HVAC field. Emphasis will be placed on reading and wiring up circuits from ladder wiring diagrams. The course will include classroom instruction along with the proper use of test instruments for troubleshooting in the lab.

AHR1200 (3 - 0) 3 cr. hrs.

Refrigeration Motors

Prerequisite: AHR1000 and AHR1130 with a minimum grade of C.
Students will take what they learn in the Basic Electricity course and expand their knowledge of how motors in the HVAC work including capacitors, power distribution, and magnetism. Will include classroom and lab instruction with troubleshooting.

AHR1205 (2 - 1) 3 cr. hrs.

Heat Pumps and Electric Heat

Prerequisite: AHR1005, AHR1015 and AHR1105 with a minimum grade of C.
Learn the function, installation, and troubleshooting electric sources of heating including resistance heating, heat pumps, and geo thermal systems.

AHR1215 (0 - 0) 3 cr. hrs.

Gas Heating Principles

Prerequisite: AHR1015 and AHR1115 with a minimum grade of C.
Understand the gas heating principles and how they pertain to the HVAC industry including gas furnaces and other appliances.

AHR1300 (3 - 0) 3 cr. hrs.

Refrigeration Controls

Prerequisite: AHR1000, AHR1130, and

AHR1200 with a minimum grade of C.
Students will take what they learn in the Basic Electricity and Refrigeration Motors course and expand their knowledge of how motors are controlled in the HVAC work including switches, relays, safety controls, and more. Will include classroom and lab instruction with troubleshooting.

AHR1305 (2 - 1) 3 cr. hrs.

Indoor Air Fundamental & Sheetmetal

Prerequisite: AHR1005, AHR1015, AHR1105, AHR1205 and AHR1215 with a minimum grade of C.
Be able to design and build duct systems and identify the properties of air, including humidity, temperature, and psychrometric properties.

AHR1315 (2 - 1) 3 cr. hrs.

Installations of Residential System

Prerequisite: AHR1005, AHR1015, AHR1105, AHR1205, AHR1215, and AHR1305 with a minimum grade of C.
Understand the installation procedures for typical residential applications.

AHR1320 (2 - 1) 3 cr. hrs.

Commercial Refrigeration Systems

Prerequisite: AHR1005, AHR1015, AHR1105, AHR1205, AHR1215, AHR1305, and AHR1315 with a minimum grade of C.
Understand the theory and selection of commercial applications.

AHR1400 (3 - 0) 3 cr. hrs.

Residential Cooling/Heating

Prerequisite: AHR1000, AHR 1010, AHR1030, AHR1100, AHR1130, AHR1200, and AHR1300 with a minimum grade of C.
Concentrates on the installation and maintenance of residential heating and cooling systems including split systems, packaged systems, and mini-splits. Load calculations and sheet metal fabrication skills will be included in classroom and lab instruction on gas and electric furnaces along with air conditioners and heat pumps will be included in lab projects.

AHR1405 (2 - 1) 3 cr. hrs.

Troubleshooting Residential Systems

Prerequisite: AHR1005, AHR1015, AHR1105, AHR1205, AHR1215, AHR1305, and AHR1315 with a minimum grade of C.
Understand the troubleshooting techniques for typical residential applications.

AHR1415 (2 - 1) 3 cr. hrs.

Troubleshooting Commercial Refriger

Prerequisite: AHR1005, AHR1015, AHR1105, AHR1205, AHR1215, AHR1305, AHR1315, and AHR1320 with a minimum grade of C.
Understand operation and troubleshooting techniques for commercial applications.

AHR1500 (3 - 0) 3 cr. hrs.

Commercial Cooling/Heating

Prerequisite: AHR1000, AHR 1010, AHR1030, AHR1100, AHR1130, AHR1200, and AHR1300, with a minimum grade of C.
Concentrates on the installation and maintenance of heating and cooling systems including packaged gas/electric and other systems found in a commercial setting. Building science including renewable and sustainable fuel sources will also be covered and tested for the Green awareness Certification. Classroom and lab instruction on gas and electric furnaces along with air conditioners and heat pumps will be included in lab projects.

AHR1520 (3 - 0) 3 cr. hrs.

Commercial Refrigeration

Prerequisite: AHR1000, AHR1010, AHR1030, AHR1100, AHR1130, AHR1200, and AHR1300 with a minimum grade of C.
Concentrates on the inner-workings and maintenance of refrigeration systems including walk-in coolers, cold tables, reach-in refrigerators and other systems found in a commercial setting. Classroom and lab instruction will be included.

AHR1600 (3 - 0) 3 cr. hrs.

Troubleshooting Heat/Cooling System

Prerequisite: AHR1000, AHR 1010, AHR1030, AHR1100, AHR1130, AHR1200, AHR1300, AHR1400, AHR1500 and AHR1520 with a minimum grade of C.
Concentrates on taking what the student has learned and apply it to troubleshooting all types of heating, cooling, and refrigeration systems. Employment Ready Certification test will be at the end of the course. Classroom and lab instruction will be included.

AHR1604 (3 - 0) 3 cr. hrs.

Pump Systems

Focuses on centrifugal, turbine, diaphragm, peristaltic, piston, gear and magnetic pumping systems. Designed to help the student understand the function, construction and installation of each style of pump. Students will demonstrate how to match a pump to a specific application and install it. Students will use the lab to acquire the hands-on portion of installing and troubleshooting pump systems.

AHR1612 (3 - 0) 3 cr. hrs.

Thermal Troubleshooting

Introduces students to theory and problems with thermal transfer. Temperature and pressure relationships, units of measure, enthalpy and the gas laws will be covered. Definition of regions of a phase change in relationship to sensible and latent heat will be explored. Lab experiments will help students to understand system applications.

ART

ART1130 (1 - 3) 3 cr. hrs.

Drawing I (Spring, Fall)

MOTR PERF105D



Develop drawing skills with an emphasis on the fundamentals of drawing including an introduction to line, form, value, and perspective.

Stress visual awareness, sensitivity, and judgment using the elements of art. Understand the fundamentals of various dry media.

ART1140 (1 - 3) 3 cr. hrs.

Drawing II (Spring, Fall)

Prerequisite: ART1130 with a minimum grade of C. Continue to develop drawing skills from ART1130. Expand techniques and concepts to include gesture drawing and drawing from imagination. Emphasize human anatomy and figure drawing while developing organizational concepts, copying masterpieces, and exploring a variety of media.

ART1160 (1 - 3) 3 cr. hrs.

Painting I

MOTR PERF105P - 2019



Understand the fundamentals of wet media with an emphasis on oil paint and still life. Develop painting concepts using the elements of art, composition and drawing, focusing on technique and the effective use of color.

ART1230 (1 - 3) 3 cr. hrs.

Ceramics I (Spring, Summer)

MOTR PERF105C - 2019



Study basic ceramic principles. Emphasize hand-built techniques, and include wheel-thrown pottery and glazing.

ART1490 (3 - 0) 3 cr. hrs.

History of Art I

MOTR ARTS101



Investigate art history from the Prehistoric to Medieval era with an emphasis on, but not limited to, western civilizations. Consider works of art and art styles through description, content, and context.

ART1500 (3 - 0) 3 cr. hrs.

History of Art II

MOTR ARTS102



Investigate art history from the Proto-Renaissance to the end of the Baroque with an emphasis on, but not limited to, western civilizations. Consider works of art and art styles through description, content, and context.

ART1510 (3 - 0) 3 cr. hrs.

History of Art III

MOTR ARTS100 - 2022



Investigate art history from the late 18th century to the contemporary with an emphasis on, but not limited to, western civilizations. Consider works of art and art styles through description, content, and context.

ART1530 (3 - 0) 3 cr. hrs.

Introduction to Humanities

MOTR HUMN100 - 2022



Stimulate visual awareness, artistic acuity, and cultural intelligence. Compare and integrate the modes of expression: visual, performing and literary to competently discuss the arts. Discuss works of art through description, content, and context.

ART1550 (1 - 3) 3 cr. hrs.

Beginning Photography (Spring, Fall)

MOTR PERF105GA - 2022



Learn the basics of photography concentrating on an understanding of camera settings. Gain creative controls of the camera and techniques of black and white film developing and printing as well as digital photography.

ART1610 (Arr - Arr) 3 cr. hrs.

Topics in Visual Arts I

Prerequisite: ART1490, or ART1500, or ART1510 or ART1530 with a minimum grade of C, or instructor consent.

Examine specific topics in visual art with a clear intention or goal. Each Topics in Visual Arts course will be tailored to the instructor's proficiency and the students' goals and abilities.

ART1640 (1 - 3) 3 cr. hrs.

Printmaking (Fall)

MOTR PERF105GA - 2023



Introduce traditional and contemporary graphic processes, materials, and equipment. Explore a variety of printmaking media from a selection of monotypes, linoleum blocks, wood blocks, and more.

ART1710 (Arr - Arr) 3 cr. hrs.

Topics in Visual Arts II

Prerequisite: ART1610 with a minimum grade of C, or instructor consent. Advanced or continued examination of specific topics in visual art with a clear intention or goal. Each Topics in Visual Arts course will be tailored to the instructor's proficiency and the students' goals and abilities.

ART1740 (0 - 3) 3 cr. hrs.

Watercolor I

MOTR PERF105P - 2022



Prerequisite: ART1130 with a minimum grade of C or instructor consent. Introduce watercolor practices and theory with an emphasis on experimentation and creative expression. Offered on demand.

ART1830 (1 - 3) 3 cr. hrs.

Two-Dimensional Design (Fall)

MOTR PERF105GA - 2022



Emphasize principles and elements of design through a series of assigned problems. Apply various wet and dry media including: water soluble paint, construction paper, and ink.

ART1880 (1 - 3) 3 cr. hrs.

Color Theory (Spring)

MOTR PERF105GA - 2022



Explore various color theories as well as cultural and historical application through a series of problems. Apply various wet and dry media including: water soluble paint, construction paper, and color pencils to design problems.

ART1930 (1 - 3) 3 cr. hrs.

Sculpture I (Spring)

MOTR PERF105S - 2019



Explore basic approaches, traditional and contemporary, to 3-dimensional art making. Emphasize form, space, movement, texture and proportion. Media

may include clay, paper mache, wire mesh, found objects and other materials.

ART2160 (1 - 3) 3 cr. hrs.

Painting II

Prerequisite: ART1160 with a minimum grade of C or instructor consent. Expand on Painting I. Strengthen composition and color. Consider landscape, still life, abstraction and personal expression.

ART2162 (1 - 3) 3 cr. hrs.

Sculpture II (Spring)

Prerequisite: ART1930 with a minimum grade of C. Emphasis on advanced three-dimensional projects stressing creative approaches to new materials and processes. Stress importance of human figure and abstraction, as well as large-scale work.

ART2172 (1 - 3) 3 cr. hrs.

Ceramics II (Spring, Summer)

Prerequisite: ART1230 with a minimum grade of C. Expand on hand-building and glazing techniques from Ceramics I. Emphasis on wheel-thrown and combination pieces, as well as personal expression.

ART2174 (1 - 3) 3 cr. hrs.

Printmaking II (Fall)

Prerequisites: ART1640 with a minimum grade of C or instructor consent. Continue to explore media from Printmaking I. Introduce new techniques: chine colle, transfers and mixed media. Consider personal expression and proper documentation of completed prints.

ART2176 (1 - 3) 3 cr. hrs.

Painting III

Prerequisites: ART1160 and ART2160 with a minimum grade of C or instructor consent. Build on Painting I and II to develop an artistic perspective. Discuss consistent work, professional practices, and goal-making as part of portfolio development.

ART2180 (1 - 3) 3 cr. hrs.

Ceramics III (Spring, Summer)

Prerequisites: ART1230 and ART 2172 with a minimum grade of C. Emphasis on form, consistency and personal exploration. Elevate execution of wheel-thrown pieces as well as slab pot construction. Introduce figure construction and consideration of form-content.

ART2200 (3 - 0) 3 cr. hrs.

Printmaking III (Fall)

Prerequisite: ART1640 and ART2174 with a minimum grade of C. Create high quality prints while exploring art

historical topics, such as theme and variation, in addition to personal expression. Require consistent serial prints in single and multi-colors. Complete at least three editions of five high-quality prints employing two different printmaking processes presented in Printmaking I and II. Proper documentation is required.

AUTOMOTIVE TECHNOLOGY

AUT1015 (Arr - Arr) 4 cr. hrs.

Automotive Engine Repair

Prerequisite: AUT1500 and AUT1800 with a minimum grade of C, or instructor consent.

Covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT1080 (3 - 0) 3 cr. hrs.

Introduction to Auto Tech

Course will impart the knowledge necessary to work safely with automotive shop chemicals, basic hand tools, and power tools. The student will learn how to properly raise a vehicle for service with a floor jack and how to safely lift a vehicle. This course will familiarize the student with the Occupational Safety and Health Administration (OSHA) and the Hazard Communications Standard (HCS) Material Safety Data Sheets (MSDS).

AUT1090 (Arr - Arr) 4 cr. hrs.

Intro to Automotive Technology

Imparts knowledge necessary to work safely within the automotive field as an entry level general service technician that will do oil changes, multi-point inspections and changes tires. Students will learn how to properly use shop equipment and tools. Students will become certified to operate automotive vehicles safely. Students will become familiar with the dangers of chemicals and equipment that are used in the industry. Students will be introduced to scan tools. Students will become familiar with mounting and balancing tires and tire pressure monitor systems.

AUT1200 (3 - 0) 3 cr. hrs.

Auto Electrical Systems I

Introductory course covers the fundamentals of automotive electrical systems, including basic electrical theory, circuit design, and common electrical components. Students will learn to read wiring diagrams and perform basic diagnostic procedures using multimeters and other diagnostic tools. Hands-on lab activities reinforce theoretical knowledge.

AUT1210 (0 - 0) 3 cr. hrs.

Automotive Braking Systems Drum

Provides an in-depth look at drum brake systems used in modern vehicles. Students will learn about the components, operation, and maintenance of drum brakes, as well as diagnostic techniques for common issues. Practical lab sessions will focus on inspection, adjustment, and repair of drum brake systems.

AUT1220 (3 - 0) 3 cr. hrs.

Auto Electrical System II

Building on the basics, this course delves deeper into complex automotive electrical systems, including advanced circuit analysis and diagnostics. Topics include battery technology, starting and charging systems, and electronic control units (ECUs). Students will develop skills in troubleshooting and repairing electrical faults in various automotive systems.

AUT1223 (Arr - Arr) 3 cr. hrs.

Automatic & Manual Transmissions

Prerequisite: AUT1500 with a minimum grade of C, or instructor consent. Introductory course that covers automatic and manual transmissions and drivetrain components. Students will gain an understanding of the operation of an automatic and manual transmission. Students will also gain an understanding of how u-joints and cv axles work. Students will study the theory and operation of transmissions and drivetrain components. ASE education foundation task list will be followed.

AUT1240 (3 - 0) 3 cr. hrs.

Auto Electrical Systems III

Advanced course focuses on the integration and troubleshooting of sophisticated automotive electrical systems. Topics include advanced diagnostics, CAN bus communication, and hybrid vehicle electrical systems. Students will engage in complex diagnostic scenarios and repair procedures, preparing them for high-level electrical system challenges.

AUT1250 (Arr - Arr) 3 cr. hrs.

Automotive Brake Systems

Prerequisite: AUT1090 with a minimum grade of C, AND concurrent enrollment in AUT1440 and AUT1250; or instructor consent. Explores disc and drum brake systems, covering their design, operation, and maintenance. Students will learn about the components and repair procedures for both disc and drum systems including calipers, rotors, brake pads and wheel cylinders and drums. Course will also cover diagnostic techniques of base brakes as well as antilock brake systems and traction control systems.

AUT1320 (3 - 0) 3 cr. hrs.

Auto Braking Systems-Disc

Explores disc brake systems, covering their design, operation, and maintenance. Students will learn about the components of disc brakes, including calipers, rotors, and pads, as well as diagnostic and repair techniques. Hands-on labs will provide experience in servicing and troubleshooting disc brake systems.

AUT1400 (3 - 0) 3 cr. hrs.

Auto Steering & Suspension

Covers the principles and components of automotive steering and suspension systems. Students will study various types of suspension systems, steering mechanisms, and alignment procedures. Practical labs will involve inspecting, diagnosing, and repairing steering and suspension issues to ensure vehicle safety and performance.

AUT1440 (Arr - Arr) 3 cr. hrs.

Automotive Chassis

Prerequisite: AUT1800 with a minimum grade of C, AND concurrent enrollment in AUT1250 and AUT1440; or instructor consent.

Covers the principles and components of automotive suspension systems and how to adjust steering component's while using industry standard equipment. Students will study various types of suspension systems, steering mechanisms, and alignment procedures. Course will follow the ASE Education task guidelines under the AST for suspension and steering.

AUT1500 (3 - 0) 3 cr. hrs.

Emissions & Fuel Control Systems

Examines the systems and technologies used to control vehicle emissions and manage fuel delivery. Topics include catalytic converters, oxygen sensors, and fuel injection systems, as well as regulations and standards for emissions. Students will learn diagnostic and repair techniques for maintaining compliance with emissions standards.

AUT1600 (3 - 0) 3 cr. hrs.

Auto Heating & Air Conditioning

Focuses on the principles and operation of automotive heating, ventilation, and air conditioning (HVAC) systems. Students will learn about the components and functions of HVAC systems, as well as diagnostic and repair procedures for common issues. Hands-on labs will involve testing, servicing, and troubleshooting HVAC components.

AUT1700 (3 - 0) 3 cr. hrs.

Auto Tire & Wheel Alignment

Covers tire construction, selection, and maintenance, as well as wheel alignment principles and procedures. Students will learn about tire balancing, alignment angles, and the equipment used in alignment services. Practical sessions will focus on performing alignments and diagnosing related issues to ensure proper vehicle handling and tire wear.

AUT1800 (3 - 0) 3 cr. hrs.

Auto Electronic Test Equipment

Introduces students to the electronic test equipment used in diagnosing and repairing modern automotive systems. Topics include the use of oscilloscopes, scan tools, and other diagnostic instruments. Students will gain hands-on experience in utilizing these tools to

troubleshoot and resolve electrical and electronic faults.

AUT1900 (3 - 0) 3 cr. hrs.

Auto Tech Internship I

Course includes work experience in an automotive business with documented work hours and weekly reflections on various on-the-job experiences.

AUT1920 (3 - 0) 3 cr. hrs.

Auto Tech Internship II

Course is a continuation of prior work experience in an automotive business, with additional documented work hours and weekly reflections on various on-the-job experiences.

AUT2080 (Arr - Arr) 4 cr. hrs.

Engine Performance

Prerequisite: AUT1010 with a minimum grade of C, or instructor consent.

Course takes an in-depth look at engine performance, including concepts in the diagnosis and repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today.

BEHAVIORAL HEALTH SUPPORT

BHS2000 (3 - 0) 3 cr. hrs.

Intro to Behavioral Health Support

Prerequisite: One of the following: (1) ENG1330 with a minimum grade of C, or currently enrolled, or (2) a minimum ACT English score of 18, or minimum Accuplacer Next Generation writing score of 250, or (2) an ACT English score of 15-17, or Accuplacer Next Generation writing score of 237-249, AND a 3.0 cumulative high school grade point average, AND one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.

Introductory course exposes students to the programs, services, and facilities within the behavioral healthcare system. Students will be introduced to the populations served, treatment approaches provided, professional requirements, and necessary skills for roles in behavioral health support. The course covers the range of settings in which care is delivered, including community mental health centers, hospitals, residential programs, schools, criminal justice systems and private practice. A key focus is understanding effective, compassionate approaches to working with diverse client populations in need of mental health and substance abuse services. Students will gain broad-based knowledge to prepare them for beginning a career path in today's behavioral health support field.

BHS2010 (3 - 0) 3 cr. hrs.

Legal/Ethical Issue in Behavior Hlt

Co-requisite: BHS2000 with a minimum grade of C, or concurrent enrollment. Examines the laws, regulations, and ethical standards relevant to behavioral health services in Missouri. Students will review legal and ethical considerations surrounding mental health issues, including topics such as confidentiality, mandated reporting, informed consent, professional boundaries, and common legal matters faced by individuals with mental health conditions. The course covers ethical principles, standards of care, and ethical decision-making models. Students will gain an understanding of legal and ethical obligations in order to practice responsibly and make sound judgements in complex situations. A key focus is learning to uphold ethical, compassionate, person-centered care while adhering to legal requirements as a behavioral health support professional.

BHS2020 (3 - 0) 3 cr. hrs.

Systems of Care

Co-requisite: BHS2000 with a minimum grade of C, or concurrent enrollment. Introduces students to the various systems and contexts in which behavioral health clients are involved, and the role of the community support specialist in helping clients navigate those systems. Topics will include understanding dynamics and making referrals within families, mental health agencies, medical settings, social services, schools, and other community resources. Students will learn how to effectively collaborate with other professionals across systems to coordinate quality care. A core focus will be developing skills to advocate for and empower clients to access and derive maximum benefit from the range of services and supports available. Students will gain knowledge essential for guiding clients through multiple complex systems as part of a comprehensive treatment/recovery plan.

BHS2030 (3 - 0) 3 cr. hrs.

Integrated Health

Prerequisite: BHS2000 with a minimum grade of C. Exposes students to common chronic diseases and healthcare issues experienced by those in behavioral health settings. Students will learn about the signs, symptoms, evidence-based management, and challenges surrounding treatment for conditions that may co-occur with mental illness and substance abuse disorders. Topics also include supporting overall wellness and recovery through nutrition, exercise, stress management, and integrative modalities. The course covers self-care practices to sustain the health, compassion, and resilience of behavioral health support professionals. Students will gain knowledge to understand complex health factors influencing this population and empower clients to optimize physical health and self-management.

BHS2100 (3 - 0) 3 cr. hrs.

Substance Use Disorders

Co-requisite: BHS2000 with a minimum grade of C, or concurrent enrollment. Provides an interdisciplinary examination of psychoactive drug use, misuse, and dependence. Students will explore historical and sociological

perspectives on substance abuse, gaining on overview of the physiological processes and impacts of addiction, including risk factors. Treatment and prevention approaches are discussed using an age, culture, and gender-sensitive lens. Students will identify the effects of continued substance use and abuse in current life situations. The course aims to build understanding of the complex biological, psychological, and social dimensions of drug abuse. Students will analyze factors contributing to dependence, the effects on individuals and communities, and evidence-based strategies for helping those impacted.

BHS2140 (3 - 0) 3 cr. hrs.

Practicum I

Co-requisite: BHS2000 with a minimum grade of C, or concurrent enrollment. This practical experience course allows students to gain hands-on training in a behavioral health setting working with individuals, families, and communities. Students will become familiar with the structure, function, and day-to-day operations of a mental health provider agency. The practicum integrates behavioral health theory and practice through experiential learning. Students will apply concepts from their coursework under supervision at a field site. Note: Both Practicums in combination require completion of 300 total hours, with a minimum of 225 hours to be completed at a DBH-contracted behavioral health provider agency. Site placements may have additional requirements. Students will build valuable experience and skills to prepare them for entry-level positions in today's behavioral health field.

BHS2150 (3 - 0) 3 cr. hrs.

Family and Youth Issues

Co-requisite: BHS2000 with a minimum grade of C, or concurrent enrollment. Provides an in-depth look at family dynamics and how family structures and communication patterns influence problem development and intervention approaches. Students will examine various family configurations and their effects on family functioning. Evidence-based family and youth interventions aimed at prevention and treatment will be addressed. The vital role of community support systems in family intervention efforts will also be explored. Students will gain an understanding of applying family systems theories to assess issues and develop culturally-sensitive solutions. A core focus will be analyzing family risk and resilience factors and developing skills to empower families through difficult transitions and challenges.

BHS2160 (3 - 0) 3 cr. hrs.

Clinical Encounters I

Co-requisite: BHS2000 with a minimum grade of C, or concurrent enrollment. Develops student skills in interviewing and assessment to support effective client treatment. Students will learn fundamental interviewing techniques and be introduced to various screening tools and assessments used with clients. The class will take students through the full process, from conducting initial interviews and assessments, to developing individualized treatment plans based on assessment finding, to completing service notes and documentation. Key learning outcomes include gaining competency in

building rapport through interviewing, selecting and properly utilizing assessment instruments, interpreting results to inform treatment planning, and completing quality documentation. Students will get hands-on practice with interviewing and assessment methods essential for the helping professions.

BHS2170 (3 - 0) 3 cr. hrs.

Clinical Encounters II

Prerequisite: BHS2160 with a minimum grade of C. Develops student competencies in crisis intervention, conflict resolution, and de-escalation skills. Students will become familiar with recognizing, assessing, and appropriately responding to crises and highly charged situation. Specific topics include implementing safety planning, verbal and non-verbal de-escalation techniques, crisis documentation methods, and effectively mobilizing resources. Students will gain hands-on experience in crisis scenarios through demonstrations, case studies, and simulations. A key focus is learning evidence-based approaches for stabilizing and supporting those in crisis while considering safety for all parties involved. Students will build vital skills for assessing risk, intervening, and promoting resilience when faced with diverse crisis situations in the field.

BHS2180 (4 - 0) 4 cr. hrs.

Evidence Based Treatments

Co-requisite: BHS2000 with a minimum grade of C, or concurrent enrollment. Introduces students to commonly used prevention and intervention approaches in behavioral health, with an emphasis on skills training. Students will gain competency in research-supported, evidence-based practices such as trauma-informed care, motivational interviewing, and well coaching. The provides hands-on skills development for implementing behavioral health strategies focused on empowering clients, reducing risks, and promoting health functioning. Students will have opportunities to practice and apply intervention models through simulations and exercises. A key focus is learning to select and deliver appropriate interventions based on client needs and treatment goals. Students will gain skills vital for providing effective, compassionate care in today's behavioral health field.

BHS2190 (3 - 0) 3 cr. hrs.

Practicum II

Prerequisite: BHS2140 with a minimum grade of C. Advanced practicum provides students with continued applied training in a behavioral health setting under supervision. Students will engage in supervised direct interactions working with individuals, families, and communities facing various behavioral health challenges. The practicum enables students to further integrate and apply concepts from their coursework in real-world practice. Students will build their competencies and skills related to assessment, intervention, documentation, and ethical/professional conduct. Placement sites may have additional specific requirements. Through hands-on experiential learning, students will gain valuable preparation for entry-level positions across today's behavioral health systems.

BHS2600 (1 - 0) 1 cr. hrs.

Survey Psychotherapy Modalities/Ani

Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Highlights the different aspects of psychotherapeutic modalities utilized in animal-assisted interventions. This course is most suited for post-graduate students or students with a desire to work in an animal-assisted psychotherapy practice.

BIOLOGICAL SCIENCE

BIO1100 (3 - 0) 3 cr. hrs.

Introduction to Biological Science

MOTR BIOL100



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Explore the fundamentals of biology as well as how biology is applied in the real world. Examines the scientific method, the characteristic elements, processes and features common to all life forms, and the nature and workings of the human body. Designed to meet general education requirements and is intended for the non-science major.

BIO1150 (3 - 4) 5 cr. hrs.

General Biology

MOTR BIOL150L



Prerequisite: MAT0930, MAT0935 or higher with a grade of C or above, or concurrent enrollment, or a minimum score of 14 on the ACT math, or minimum score of 200 on the Accuplacer Next Generation Quantitative Reasoning, Algebra and Statistics, or a minimum score of 200 on the Advanced Algebra and Functions, AND one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Explore selected basic biological concepts and principles fundamental to the understanding of the operation of biological systems. Learn the

nature of science concepts of biological organization, characteristics and chemistry of the cell, energy relationships, reproduction, heredity, classification, evolution and environmental relationships of living things. Meets the general education biological science requirement. Includes lab.

BIO1430 (3 - 0) 3 cr. hrs.

Environmental Science

MOTR BIOL100EV



A general introductory course in human ecology. The general concepts of ecology will be covered in early chapters. The remainder of this course emphasizes human contributions to resource depletion, energy conservation, overpopulation and overconsumption, pollution and subsequent worldwide effects.

BIO2112 (3 - 4) 5 cr. hrs.

General Botany (Spring)

MOTR BIOL150LB



Prerequisite: BIO1150 with a minimum grade of C or instructor consent. Emphasizes biological principles as applied to plants. Plant structure, function, genetics, reproduction, physiology and classification are stressed. Meets the general education biological science requirement. Includes lab.

BIO2122 (3 - 4) 5 cr. hrs.

General Zoology

MOTR BIOL150LZ



Prerequisite: BIO1150 with a minimum grade of C or instructor consent. Explore the important principles and concepts of zoology. Emphasizes cell biology, genetics, reproduction, and the major animal phyla. Meets for three lectures and two double laboratory periods per week. Meets the general education biological science requirement. Includes lab.

BIO2540 (3 - 4) 5 cr. hrs.

Human Anatomy and Physiology

MOTR LIFS150LAP



Prerequisite: BIO1150, BIO1250, BIO1350, BIO2112, BIO2122 or PHS1250 with a minimum grade of C. Designed to provide the student with an understanding of the structure and function of the human body. Topics include the basic chemistry of life processes, macroscopic and microscopic study of tissues, skeletal muscle physiology, nerve cell signaling, and the anatomy of selected human body systems (integumentary, skeletal,

muscular, circulatory, and nervous). BIO2540 is a one semester course considered as Anatomy and Physiology I for many transfer institutions and recommended for science or physical education majors. For students applying to the MAC nursing program the BIO2600 Human Anatomy and BIO2620 Human Physiology sequence is recommended instead. Includes lab.

BIO2600 (3 - 4) 5 cr. hrs.

Human Anatomy

MOTR LIFS150LA - 2020



Co-requisite: PHS1250 or PHS1350 or higher with a minimum grade of C. The study of the structure of the human body. Topics include body organization, cellular and developmental anatomy and the anatomy of selected body systems (integumentary, skeletal, cardiovascular, neural and muscular). Remaining body systems are covered in Human Physiology (BIO2620).

BIO2620 (3 - 4) 5 cr. hrs.

Human Physiology

Prerequisites: BIO2540 or BIO2600 and PHS1250 or PHS1350 with a minimum grade of C.

A continuation of BIO2600. Focuses on the biochemical, cellular and organ level functioning of those systems introduced in BIO2600. Systems include digestive, metabolic, endocrine, cardiovascular, immunology, muscular, neural, renal and respiratory.

BIO2700 (3 - 2) 4 cr. hrs.

Microbiology

Prerequisites: BIO2540 or BIO2600, BIO2620 and PHS1250 or PHS1350 with a minimum grade of C or instructor consent. Introduces the morphology, biochemical activities, cultivation, control, history of epidemiology, immunology, virology and diagnostic procedures used to identify selected microorganisms that are important in the health sciences.

BUSINESS ADMIN & ECONOMICS

BUS1190 (3 - 0) 3 cr. hrs.

Business Ethics

MOTR PHIL102P - 2020



A presentation of basic principles of business practices and ethical standards as they apply in today's business environment. Real-world illustrations will help students learn to address the overall concepts, processes, and best practices associated with successful business ethics programs. Students will receive lectures and materials as well as participate in the discussion and application of ethics in particular business cases. This pragmatic approach will prepare students for the real ethical issues and dilemmas they will face in

their business careers.

BUS1330 (3 - 0) 3 cr. hrs.

Survey of Economics

MOTR ECON100



A survey course of economics intended for non-business majors. Both macroeconomic and microeconomic topics will be integrated into real-world application. Students will learn that "the economy" is important to their lives and that our collective choices on how the economy is structured are important. Not recommended for first-year students.

BUS2000 (3 - 0) 3 cr. hrs.

Principles of Accounting I

An introductory course in accounting principles. Covers the accounting process for a sole proprietorship (service and merchandising organizations) and the following specialized accounting areas: cash, receivables, payables, deferrals, accruals, inventory, plant assets, intangible assets and payroll. OST1500 recommended.

BUS2050 (3 - 0) 3 cr. hrs.

Principles of Accounting II

Prerequisite: BUS2000, or OST1500 and OST1520 with a minimum grade of C. A continuation of BUS2000. Topics include partnership accounting, accounting for corporations, cost accounting, financial statement analysis, and managerial accounting.

BUS2100 (3 - 0) 3 cr. hrs.

Fundamentals of Management

A basic course in the principles and practices of business management as it concerns planning, organization, staffing, leading, and controlling.

BUS2330 (3 - 0) 3 cr. hrs.

Marketing

A study of the decision areas involved in providing consumers with goods and services. Topics include product decisions, branding, packaging, consumer motivation, consumer characteristics, pricing, promotion, and distribution. Students develop a hands-on understanding of marketing and current industry trends through real world projects and assignments.

BUS2530 (3 - 0) 3 cr. hrs.

Legal Environment of Business

A study of the legal environment in which a business person must operate from the standpoint of legal institutions, the legal process, and a survey of the following substantive areas of law: crimes, torts, contracts, sales, labor law, and environmental law.

BUS2930 (3 - 0) 3 cr. hrs.

Principles of Macroeconomics

MOTR ECON101



Primarily a study of the U.S. economic system. Topics include economic growth, macroeconomic measurements, trade, government fiscal policy, money and monetary policy.

BUS2940 (3 - 0) 3 cr. hrs.

Principles of Microeconomics

MOTR ECON102



This course consists of analysis of the individual consumer, firm, and market. The principles of demand and supply, elasticity, price determination, costs, market structure, and other related economic issues are studied.

CONSTRUCTION/BUILDING TECH

CBT1020 (3 - 0) 3 cr. hrs.

Construction Carpentry I

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Shop safety rules, common jobsite hazards, and methods to abate these hazards will be the first topic in this course. Students will also learn measuring, marking, squaring and leveling skills. The identification and safe usage of hand and power tools in a primary emphasis. Circular saws, jig saws, reciprocating saws, impact drivers, and drills will be introduced in this course. Fasteners and fastening methods will also be covered. The duration of this course will involve students completing various projects that demonstrate basic carpentry competencies.

CBT1025 (Arr - Arr) 3 cr. hrs.

Introduction to Construction

Emphasizes understanding the language of blueprints. Students will learn about construction drawing organization, lines, dimensions, symbols and abbreviations. Reading and interpreting floor plans will also be covered. Basic trade math and a construction industry overview are the final topics of this course.

CBT1100 (3 - 0) 3 cr. hrs.

Blueprint Reading and Layout

Structured as a lecture course in a traditional classroom setting. Students will learn the fundamental aspects of blueprint reading for residential and light-commercial structures. Basic trade math, construction drawing organization, lines and symbols, specifications, and building codes will be covered in the first half of this course. The second half of this course will involve students reading and interpreting the following areas of a blueprint: site plans, architectural

drawings, foundation prints, structural prints, and residential framing prints.

CBT1105 (Arr - Arr) 3 cr. hrs.

Technical Skills for Carpenters

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Shop safety rules, common jobsite hazards, and methods to abate these hazards will be the first topic of this course. Students will learn measuring, marking, squaring and leveling techniques. The identification and safe usage of hand and power tools is a primary emphasis. Circular saws, jog saws, reciprocating saws, impact drivers, and drills will be introduced in this course, as students complete various technical projects that demonstrate basic carpentry competence.

CBT1160 (3 - 0) 3 cr. hrs.

Materials & Cost Estimation

Prerequisite: CBT 1100 with a minimum grade of C or instructor consent. Structured as a lecture course in a traditional classroom setting. Students will use previously learned blueprint reading skills to figure material quantities for an assigned project. Concrete and reinforcement, framing material, exterior finish material, and interior finish material will be estimated and priced. Students will be provided with current material prices for all related pieces of a project. Unit quantities, unit costs, total quantities, total costs, and project subtotals will be figured for each estimated area. Students will utilize a standardized take-off sheet to organize their estimations. Upon completion of each estimated area, a final take-off sheet will be ready to propose to a material vendor.

CBT1200 (3 - 0) 3 cr. hrs.

Construction Carpentry Skills II

Prerequisite: CBT 1400 with a minimum grade of C or instructor consent. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. This course is a continuation of CBT1400: Floor/Wall Layout and Framing. Ceiling framing, deck and porch framing, and stair construction are the main emphasis of this course. Students will frame flat and angled ceilings. Post-and-beam construction will be introduced in the deck and porch framing units. Stair construction is the final topic of this course. Students will learn how to calculate, lay out, cut and assemble all of the components of a straight-flight set of stairs.

CBT1205 (Arr - Arr) 3 cr. hrs.

Concrete Formwork

Corequisite: CBT1100 with a minimum grade of C. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Concrete usage in the industry and the consistency of concrete are the first topics covered in this course. Volume calculation skills will be applied, as students learn how to estimate concrete cubic yardage for their shop projects. Students will start their hands-on learning by laying out and installing footing forms.

The duration of this course will involve students assembling multiple foundation form projects using the Symons form system. Concrete reinforcement is also covered in this course, as students learn how to cut, bend, install, and tie the reinforcing rebar for their shop projects.

CBT1300 (3 - 0) 3 cr. hrs.

Concrete and Forms

Prerequisite: CBT1020 with a minimum grade of C or instructor consent. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Concrete usage in the industry and the consistency of concrete are the first topics covered in this course. Trade math and volume calculation skills will be applied, as students learn how to estimate concrete cubic yardage for their shop projects. Students will start their hands-on learning by laying out and installing footing forms. The duration of this course will involve students assembling multiple foundation form projects using both job-built forms and form panel systems. Concrete reinforcement is also covered in this course, as students learn how to cut, bend, install and tie the reinforcing rebar for their shop projects.

CBT1305 (Arr - Arr) 3 cr. hrs.

Floor Layout and Framing

Prerequisite: CBT1100 with a minimum grade of C. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Basic wood-framing principles will be the main emphasis of this course. Students will learn how to identify and calculate cut lengths for all framing members of a floor system. The hands-on section of this course will involve students working as a group to build both nominal lumber floor systems as well as an engineered I-joist system.

CBT1400 (3 - 0) 3 cr. hrs.

Floor/Wall Layout and Framing

Prerequisite: CBT1020 with a minimum grade of C or instructor consent. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Basic framing principles and building code adherence will be the main emphasis of this course. Students will learn how to identify and calculate cut lengths for all framing members of both floor and wall systems. The hands-on section of this course will start with students building a nominal lumber floor system, an engineered I-joist system, and a floor truss system. The duration of this course will involve students framing mock-up modules with both wood and metal wall members.

CBT1405 (Arr - Arr) 3 cr. hrs.

Wall Layout and Framing

Prerequisite: CBT1300 with a minimum grade of C.

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Basic wall layout and framing principles will be the main emphasis of this course. Students will learn how to identify all wall framing components as well as calculate cut

lengths for these components. The hands-on section of this course will involve students building wood-framed walls of different sizes, shapes and specifications.

CBT1500 (3 - 0) 3 cr. hrs.

Roofing Skills

Prerequisite: CBT 1200 with a minimum grade of C or instructor consent. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Roof framing, roof sheathing, and shingling are the main topics of this course. Students will frame gable and hip roofs using the hand-cut rafter method and also the truss method. Sheathing a roof and over framing onto an existing roof will also be covered. Roof finish is the final topic of this course. Students will learn how to properly flash and waterproof a roof. Both 3-tab and architectural shingle installation will be covered in this course.

CBT1505 (Arr - Arr) 3 cr. hrs.

Roof Layout and Framing

Prerequisite: CBT1300 with a minimum grade of C. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Basic roof layout and framing principles will be the main emphasis of this course. Students will learn how to identify all roof framing components as well as how to calculate cut lengths for common rafters. Roof truss installation and roof sheathing techniques will also be covered.

CBT1600 (3 - 0) 3 cr. hrs.

Exterior Finishes

Prerequisite: CBT 1200 with a minimum grade of C or instructor consent. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Exterior door, window, and siding installation are the core competencies of this course. Students will prepare rough openings in preparation for the installation of both an exterior door and a vinyl new-construction window. Exterior finish work is the primary topic of this course. Students will learn how to install vinyl siding, soffit, fascia, and other miscellaneous trim pieces on the exterior of a structure.

CBT1605 (Arr - Arr) 3 cr. hrs.

Stair Layout and Construction

Prerequisite: CBT1100 with a minimum grade of C.

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Building a straight-flight set of stairs will be the main emphasis of this course. Students will also identify all the stair system components. Stair math will be covered in detail, as students learn how to calculate stringer lengths and rise/run intersections.

CBT1700 (3 - 0) 3 cr. hrs.

Interior Finishes

Prerequisite: CBT 1600 with a minimum grade of C or instructor consent. Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Miter saws, drywall and wood routers, portable table saws, sanders, and trim nail guns are introduced in this course. Drywall installation and setting a pre-hung interior door unit are the first projects of this course. Students will also learn how to trim out a window and door by cutting and installing sills, jams, and casing. The installation of base trim and base shoe is also covered. The duration of this course involves setting base and wall cabinets.

CBT1705 (Arr - Arr) 3 cr. hrs.

Exterior Finishes

Prerequisite: CBT1100 with a minimum grade of C.

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Setting exterior doors and new-construction windows are the first topics of this course. The main emphasis is installing siding and accessories on the exterior of a wood-framed structure. Students will learn how to cut and install vinyl siding as well as aluminum soffit and fascia.

CBT1800 (3 - 0) 3 cr. hrs.

Plumbing

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. The first topic covered in this course is an overview of the plumbing code. Students will then be introduced to basic hand and power tools that are used in the plumbing trade. Measuring, cutting and joining copper supply lines and CPVC waste/vent lines is the main emphasis of this course. Students will learn how to install basic plumbing fixtures, as well as how to route supply and drain lines to and from these fixtures. Interpreting plumbing plans and specifications will be a continuous topic throughout this course.

CBT1805 (Arr - Arr) 4 cr. hrs.

Interior Finishes I

Prerequisite: CBT1100 with a minimum grade of C.

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Floor, wall and ceiling coverings are the main topics of this course. Students will learn how to hang drywall, install vinyl laminate flooring, and hang acoustical ceiling gridwork and tiles. The final topic of this course is setting an interior, pre-hung door unit and the associated hardware that goes with it.

CBT1855 (Arr - Arr) 4 cr. hrs.

Interior Finishes II

Prerequisite: CBT1100 with a minimum grade of C.

Structured as a hands-on, shop class. Students will also participate in classroom learning as new topics are introduced. Standing and running trim are the main topics of this course. Students will

learn how to cut and install base trim, base shoe, window casing, and crown mold. The final topic of this course is cabinets and countertops. Students will hang pre-fabricated cabinets and then install laminate countertops on the base cabinets.

CBT1900 (3 - 0) 3 cr. hrs.

Fundamental Aspects of Industry

Structured as a lecture course in a traditional classroom setting. Students will acquire a fundamental knowledge of the different aspects of the construction industry. Industry planning and management will be covered in this course. Students will learn about current labor issues as well as any applicable health, safety, and environmental topics. Employability traits for the construction industry is the final topic of this course. Students will learn about the technical skills, soft skills and work ethic traits that are necessary to succeed in the construction industry.

CBT2005 (0 - 6) 6 cr. hrs.

Construction Build Tech Internship

Prerequisite: CBT1025, CBT1105, CBT1205, CBT1305, CBT1405, CBT1505, CBT1605, CBT1705, CBT1805 and CBT1855 with a minimum grade of C. Structured as a hands-on, internship class. Students will be placed with a local construction company that employs carpenters. They will have an entire 16-week semester to log 180-man hours. There will be no penalty if the hours are achieved in a shorter timeframe, as the students are encouraged to log these hours as soon as possible. The CBT instructor, CBT student and a representative from the local contractor will periodically meet throughout the internship to ensure that the course outcomes are being met and that the student is performing up to the contractor's standards. Students will be actively engaged in real-world work scenarios, including but not limited to general labor, layout work, framing work, finish work, or concrete formwork. Additional lessons that are likely to be encountered during this internship are safety adherence, punctuality, work readiness, and general work ethic.

COMPUTER INFO SYSTEMS

CIS1025 (1 - 0) 1 cr. hrs.

Computer Fundamentals

Learn about the components of a computer system, including input/output devices, file management and storage, using an LMS, email, and browsing the Internet.

CIS1030 (3 - 0) 3 cr. hrs.

Information Technology for Business

Examine foundational information technologies used in today's business environment and learn about the tasks involved in various IT job roles. Prepare for the CIW Internet Business Associate (IBA) certification. General computer proficiency is expected.

CIS1620 (3 - 0) 3 cr. hrs.

A+ Comp Repair & Maintenance

Study the computer from its origin through the present day. Gain skills necessary for entry-level computer technicians. Prepare to meet the objectives of the CompTia A+ certification. General computer proficiency is expected.

CIS1670 (3 - 0) 3 cr. hrs.

Fundamentals of Networking

Explore foundational elements of a computer network. Understand the basics of the OSI Model, TCP/IP, and other protocols, network topologies, basic security principles, routing, network management, and troubleshooting. Prepare to meet the objectives of the CompTIA Network+ certification. General computer proficiency is expected.

CIS1680 (3 - 0) 3 cr. hrs.

Fundamentals of Network Security

Prerequisites: CIS1030, or CIS1875 with a minimum grade of C. Examine entry-level network security principles and recent trends. Explore common elements of cryptography, social engineering, public key infrastructure, access controls, disaster recovery, and business continuity. Study objectives covered in the CompTIA Security+ certification.

CIS1730 (2 - 0) 2 cr. hrs.

Office Applications

Enrollment in CIS1730 and CIS1050 or CIS1750 is prohibited.

Gain hands-on proficiency in accomplishing basic tasks in word processing, spreadsheet, and presentation software. Skills included are: creating documents, tables, workbooks and presentations. Learn how to format text, use formulas and functions, create charts and presentations.

CIS1750 (3 - 0) 3 cr. hrs.

Microcomputer Applications

Enrollment in CIS1750 and CIS1050 or CIS1730 is prohibited.

Gain proficiency in software programs used in the business environment. Students will use the Microsoft 365 suite of applications and develop skills in word processing, spreadsheets, presentation, and database software.

CIS1840 (3 - 0) 3 cr. hrs.

Microsoft Network Administration

Prerequisites: CIS1670, CIS1870, or CIS1875 with a minimum grade of C, or concurrent enrollment in CIS1670, CIS1870, or CIS1875, or instructor consent. Learn basic responsibilities of maintaining a Microsoft network environment including the installation and upgrade of domain controller. Gain skills implementing Active Directory, file management, access controls, authentication, group policies, server roles, and virtualization.

CIS1875 (4 - 0) 4 cr. hrs.

CCNA 1: Introduction to Networks

Module 1 introduces the architecture, structure, functions, and components of the Internet and other computer networks. Students achieve a basic understanding of how networks operate and how to build local area networks (LAN), perform basic configuration for routers and switches, and implement Internet Protocol (IP). This is the first of three courses in the Certified Cisco Networking Associate - CCNA.

CIS1885 (4 - 0) 4 cr. hrs.

CCNA 2: Switching/Routing/Wireless

Prerequisite: CIS1875 with a minimum grade of C.

Module 2 describes the architecture, structure, functions, and components of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks. This is the second of three courses in the Certified Cisco Networking Associate - CCNA.

CIS1930 (3 - 0) 3 cr. hrs.

Computer Ethics

Examine the ethical challenges and responsibilities of IT professionals as well as the casual computer user. Explore legal issues such as piracy, hacking, intellectual property, privacy, freedom of expression, and social networking issues. Learn about proper techniques in creating safe software and maintaining worker productivity.

CIS1950 (3 - 0) 3 cr. hrs.

Computer Forensics

Prerequisite: CIS1680 with a minimum grade of C. Investigate methods of analyzing computers and devices that have been used to commit a crime or as the target of a cybercrime. Learn the importance of maintaining the chain of custody and proper documentation of digital software and hardware.

CIS2080 (3 - 0) 3 cr. hrs.

Fundamentals of Linux

Prerequisites: CIS1030, CIS1670, or CIS1875 or equivalent with a minimum grade of C. Explore the fundamental elements of the Linux operating system, including concepts, architecture, networking, and administration.

CIS2120 (4 - 0) 4 cr. hrs.

CCNA 3: Enterprise Network/Sec/Autom

Prerequisite: CIS1885 with a minimum grade of C.

Module 3 describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. Emphasizes network

security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation. This is the third of three courses in the Certified Cisco Networking Associate - CCNA.

CIS2200 (3 - 0) 3 cr. hrs.

Micro Spreadsheet Applications

Gain industry-valued skills using current electronic spreadsheet software. Study moderately complex topics such as file creation, manipulation, cell editing, ranges, functions, sorting, formulas, graphs and charts. General computer proficiency is expected.

CIS2400 (3 - 0) 3 cr. hrs.

Web Page Development

Develop practical skills using HTML and popular web design applications to develop and design a website. Learn effective navigational concepts and design practices using CSS, templates, and library items. General computer proficiency is expected.

CIS2520 (3 - 0) 3 cr. hrs.

Ethical Hacking

Prerequisite: CIS1680 with a minimum grade of C. Understand the importance of security testing for the purpose of identifying computer and network vulnerabilities. Learn how to use common tools and technologies to analyze vulnerabilities in common operating systems, applications, protocols, encryption methods, and social engineering.

CIS2680 (3 - 0) 3 cr. hrs.

Management of Information Security

Prerequisite: CIS1680 with a minimum grade of C. Learn the importance of the sound managerial practices in protecting information. With legal compliance as a guide, students will value the significance of identifying and calculating risks, creating sound policies and security programs, and contingency planning. Understand the role of managers in a crisis situation and effective response to the public.

CIS2960 (Arr - Arr) 3 cr. hrs.

Computer Networking Internship

Prerequisites: Sophomore standing in Computer Networking and instructor consent. Obtain supervised work experience and apply practical knowledge and skills attained in coursework.

COMMUNICATIONS

COM1060 (3 - 0) 3 cr. hrs.

Introduction to Cinema

MOTR FILM100 - 2019



Observe the techniques involved in creating good cinema including: photography, mise-en-scene (elements in visual composition), the moving camera and special effects, editing sound, acting, drama, story, writing and film from a variety of ideological perspectives. Techniques are applied to a variety of selected films for analysis, example and discussion. Gain an appreciation of film as an art form.

CRIMINAL JUSTICE

CRJ1000 (3 - 0) 3 cr. hrs.

Basic Police Science I

Open to Law Enforcement Academy students only. Students will cover the objectives set forth by the Missouri Peace Officers Standards and Training (POST) for the subject areas in Missouri Statutory Law, Civil Process and Tactical Communications.

CRJ1010 (3 - 0) 3 cr. hrs.

Criminal Justice Internship

Prerequisite: CRJ1100 with a minimum grade of C or instructor consent. Intended for criminal justice majors only who have completed a minimum of fifteen (15) hours of criminal justice courses with a grade of "C" or higher. Students are placed with a criminal justice agency in a participant/observer capacity by the department coordinator for a period of not less than 96 contact hours.

CRJ1050 (3 - 0) 3 cr. hrs.

Basic Police Science II

Open to Law Enforcement Academy Students only. Students will cover the objectives set forth by the Missouri Peace Officers Standards and Training (POST) for Domestic Violence, Community Policing and Human Behavior.

CRJ1100 (3 - 0) 3 cr. hrs.

Introduction to Criminal Justice

MOTR CRJS101 - 2020



The history and philosophy of the system, identifying the various subsystems, role expectations, and their interrelationships, theories of crime punishment and rehabilitation. The interrelationships of the various branches and functions of the criminal justice system are examined and identified.

CRJ1130 (3 - 0) 3 cr. hrs.

Introduction to Forensics

Designed to make the subject of forensic science comprehensible to a wide variety of students who are or plan to be aligned with the forensic science profession. This class will give the students an introduction to the forensic crime

laboratory, its functions, services and organization. Will also introduce the students to processing crime scenes and collecting physical evidence as well as trace evidence.

CRJ1150 (3 - 0) 3 cr. hrs.

Basic Police Science III

Open to Law Enforcement Academy students only. Students will cover the objectives set forth by the Missouri Peace Officers Standards and Training (POST) for firearms, shotgun, and patrol rifle, and advanced drug recognition training.

CRJ1170 (3 - 0) 3 cr. hrs.

Introduction to Courts

Provides students an overview of the criminal justice judicial system and its processes. It examines the courtroom work group, the trial process and challenges to the process. Will review the juvenile court system and its differences from the adult judicial system.

CRJ1200 (3 - 0) 3 cr. hrs.

Criminal Investigation I

The study of the criminal act and its investigation, including specific crimes against persons and against property. The process of fact gathering, test of hypotheses, and the problem of proof are covered.

CRJ1250 (3 - 0) 3 cr. hrs.

Basic Police Science IV

Open to Law Enforcement Academy students only. Students will cover the objectives set forth by the Missouri Peace Officers Standards and Training (POST) for defensive tactics, taser certification, NHTSA field sobriety testing and certification and Datamaster Type III breathalyzer training and certification.

CRJ1300 (3 - 0) 3 cr. hrs.

Criminal Investigation II

Open to Law Enforcement Academy Students only. Law Enforcement Academy students only. The recognition, collection, identification, preservation, transportation, and development of criminal evidence. Narrative police report writing and the preparation of cases for prosecution.

CRJ1400 (3 - 0) 3 cr. hrs.

Criminal Law

The study of constitutional, criminal common and statutory law within the context of enforcement. The impact of recent federal constitutional laws in the area of state criminal adjudication is examined. Included are the various court structures.

CRJ1440 (3 - 0) 3 cr. hrs.

Criminal Courts-Process & Issues

Provides a comprehensive examination of the criminal court system, from the basic pretrial procedures to the trial process, to the sentencing and appeals. Examining all angles, it begins with a discussion of the law and its origins, compares the federal and state court systems, and examines the key courtroom personnel.

CRJ1500 (3 - 0) 3 cr. hrs.

Criminal Evidence

The study of the basic rules of evidence applicable to criminal adjudication and other related police duties. Emphasis is placed on the question of admissibility to evidence and the practical application of procedural and substantive law and constitutional guarantees.

CRJ1520 (3 - 0) 3 cr. hrs.

Criminology

Criminology is the scientific study of crime. Students will study various aspects of crime and the criminals. This class will examine such items as crime statistics, various theories behind the cause of crime and why criminals commit them. This class goes hand-in-hand with the disciplines of psychology, sociology, and anthropology. Students will also look at specific criminals in hopes of identifying various typologies that some infamous criminals have used.

CRJ1540 (3 - 0) 3 cr. hrs.

Criminal Procedure

Focuses on the constitutional rights of criminal defendants as interpreted by the U.S. Supreme Court and how it applies to the processes of the criminal justice system. Students will discuss landmark Supreme Court decisions.

CRJ1600 (3 - 0) 3 cr. hrs.

Juvenile Justice System

The organization, functions and jurisdiction of juvenile agencies, the detention of juveniles and the processing of neglected and abandoned children. The intent, application and procedure of the Missouri Juvenile code, juvenile case disposition, crime prevention methods and reporting procedure. Theories of delinquent behavior are studied.

CRJ1700 (3 - 0) 3 cr. hrs.

Patrol & Traffic Law

Open to Law Enforcement Academy students only. The foundations of police operations, providing patrol coverage and called-for services, the principle of conspicuous presence as a means of crime prevention and preservation of the peace. Basic police responsibilities for the safe and efficient movement of vehicles and pedestrians and an in-depth study of traffic law.

CRJ1710 (3 - 0) 3 cr. hrs.

Community Policing/Problem Solving

The study of police agencies' response to the needs and demands of its citizens and the contrasting styles that vary from agency to agency. Concepts, themes, and programs advocated at the national level by federal agencies, academics, and practitioners are implemented with widely varying degrees of understanding.

CRJ1750 (3 - 0) 3 cr. hrs.

Advanced Patrol/Traffic Law

Open to Law Enforcement Academy students only. Discusses preparation for duty by the patrol officer. It demonstrates how knowledge of criminal activity, local geography and proper uniform and equipment will enhance the performance of the patrol officer. Also discusses the physical and psychological factors which affect an officer during patrol and job performance.

CRJ1760 (6 - 0) 6 cr. hrs.

Commercial Vehicle Enforce Inspect

Open to Missouri State Highway Patrol Commercial Vehicle Inspector (MSHP CVI) students only. The object of this course is to give the Probationary Commercial Vehicle Inspector (CVI) the federal certifications and basic training on the applicable state statutes that will be used in the performance of their daily duties. CVI's will also receive training in profiling, cultural awareness, as well as other areas important to the law enforcement community.

CRJ1800 (3 - 0) 3 cr. hrs.

Introduction to Corrections

An introduction to the correctional process from law enforcement through the administration of justice, probation, parole, prisons and other and correctional institutions.

CRJ1820 (3 - 0) 3 cr. hrs.

Corrections in America

Open to Department of Corrections students only. Reviews various theories of criminal causation and will provide a comparative study of global criminal justice systems. The focal point of this course is to provide the criminal justice student with a working knowledge of major correctional processes and the basic legal concepts that underlie the criminal justice field. This course will give the student some historical and judicial perspectives regarding corrections.

CRJ1900 (3 - 0) 3 cr. hrs.

Police Administration

A study of the organization and administration of various police systems, the specialized characteristics of individual police organizations and police personnel, the responsibility of police organizations and police personnel, the responsibility of police departments. The most popular and prevalent ideas, principles and assumptions pertaining to police administration are presented utilizing a multidisciplinary orientation to analyze these concepts. Emphasis is placed on the impact that

police administration exerts upon the policeman's functioning.

CRJ2000 (3 - 0) 3 cr. hrs.

Criminal Justice Report Writing

Open to Law Enforcement Academy Students only. Open to Law Enforcement Academy students only. The study and application of the process of effective criminal justice report writing. Proper formal written communications formats with an emphasis on report writing techniques requisite for the admissibility of evidence in a criminal adjudication.

CRJ2120 (3 - 0) 3 cr. hrs.

Police Photography

Basic fundamental photography will be taught with an emphasis on manual and auto functions on the camera. The student will use these skills to photograph objectives detailing most situations occurring in real-life crime-scene photography. Negatives and photos will be set in a photo book to be critiqued for quality and compassion. Court room qualifications will be final determination of the students work and performance. Prepares students for CRJ2140.

CRJ2140 (3 - 0) 3 cr. hrs.

Forensic Crime Scene Investigation

Introduces the student to the fundamentals of on-site crime-scene investigations. Specific objectives will be combined with actual crime-scene reconstruction. The student will perform practicals using photography skills, fingerprint identification and comparison, sketching microscopy, dental stand, soil analysis and site identification for blood, hair, fibers, tool marks, and tire tread comparison. The student must perform with skill and integrity in a mock trial, submitting the mock prepared evidence in trial.

CRJ2160 (3 - 0) 3 cr. hrs.

Crime Scene Analysis

Designed to be an advanced Crime Scene Investigation class. The students will be showed the proper way to collect, analyze, and submit evidence along with performing forensic pattern analysis of bloodstains, shoeprints, fingerprints, tool mark analysis and microscopic and trace evidence. The students will have to accurately perform the above-mentioned tasks through practical skill demonstrations.

CRJ2200 (3 - 0) 3 cr. hrs.

Ethics for Legal Professionals

Looks at the ethical dilemma and professional problems faced by criminal justice personnel. Students will review various ethical perspectives and discuss the practical applicability of ethical ideas and organizational codes and standards.

CRJ2220 (3 - 0) 3 cr. hrs.

Principles of Homeland Security

Provides an overview and examination of the

history, mission, and development of homeland security at the federal, state, local, and private sector levels.

CRJ2320 (3 - 0) 3 cr. hrs.

Admin of Correctional Service

Focusing on the criminal justice field of corrections, this course explores fundamental concepts related to the administration, organization and management of correctional services.

CRJ2340 (3 - 0) 3 cr. hrs.

Concepts of Community Corrections

Examines the various aspects of offender treatment planning, implementation, and special needs identification in the context of community-based correctional programs. Utilizes a comparative approach to examining the differences between traditional and community-based correctional programs.

CRJ2380 (3 - 0) 3 cr. hrs.

Probation and Parole in America

Provides the successful student with an overview of the history and role of probation and parole services in the American criminal justice system. Includes an examination of common techniques used by probation and parole officers, as well as an overview of the pre-sentence investigation process.

COMPUTER SCIENCE

CSC1100 (3 - 0) 3 cr. hrs.

Programming Logic

Explore the basics of programming and prepare for more complicated languages. Learn how to program with Python to gain confidence in skills and acquire the logic necessary for developing high-quality programs. Learn control structures, functions, lists, and file I/O before being introduced to classes.

CSC1120 (3 - 0) 3 cr. hrs.

HTML, CSS, and JavaScript

Introduces the fundamental principles and techniques of web development using HTML, CSS, and JavaScript. Students will gain a deep understanding of HTML's structure, the purpose of various HTML elements, and the role of attributes in modifying elements. Students will explore the world of CSS, learning to create visually appealing and well-structured web pages. Additionally, this course explores the complexities of JavaScript and introduces TypeScript, empowering students to become proficient in developing robust and efficient web applications. Students will learn a wide range of topics, from mastering different data types and object-oriented programming principles in JavaScript to understanding the power of TypeScript's advanced language features. Throughout the course, students will apply their knowledge to build real-world applications and gain practical experience.

CSC1220 (3 - 0) 3 cr. hrs.**Ruby on Rails Web Development I**

Extensive course provides students with a deep understanding of Ruby and Ruby on Rails, empowering them to design, develop, and deploy web applications effectively. Students will explore the core principles of Ruby, mastering data types, control structures, and file handling techniques. This course will allow students to gain hands-on experience by developing a command-line interface application using Ruby and managing Gems for enhanced project functionalities. Students will delve into the world of Ruby on Rails, learning the benefits of REST architecture and how to set up various environments for efficient configuration.

CSC1310 (3 - 0) 3 cr. hrs.**Ruby on Rails Web Development II**

Advanced Ruby on Rails Web Development course will be used to build API's that connect to applications built with other frameworks. Additionally, students will explore associations, authentication, authorization, and real-time communication with WebSockets. As students progress through the course, they will design and implement a full-fledged Ruby on Rails application, following the Model-View-Controller (MVC) architecture pattern. Project management and collaboration tools will be introduced to facilitate effective teamwork and project success.

CSC2010 (3 - 0) 3 cr. hrs.**Angular Development I**

Angular Development and Deployment Fundamentals course is designed to equip students with an in-depth understanding of Angular development and deployment, empowering them to build robust, high-performing, and secure web applications. Throughout the course, students will master the generation of Angular artifacts using Angular CLI commands and grasp the significance of a well-organized project structure for maintainable and scalable applications. Hands-on experience will be gained as students identify and resolve common issues in Angular development, employing various debugging tools and techniques. Students will explore components, directives, and services, learning to inject services effectively.

CSC2020 (3 - 0) 3 cr. hrs.**Angular Development II**

Advanced Angular Development and Deployment course covers authentication, routing, and user interaction, utilizing the Angular Router to enable secure HTTP requests and familiarizing students with testing and API integration. Advanced practices such as animations, dynamic components, modules, and application optimization will be explored, along with the integration of automated build, test, and deployment processes for efficient application deployment. Additionally, students will learn about Progressive Web Apps (PWAs) and server-side rendering using Angular Universal, enhancing application performance and user experience.

CSC2040 (3 - 0) 3 cr. hrs.**Coding Capstone Project**

Code Labs Capstone Project provides students with the opportunity to collaborate with industry partners while taking on real-world challenges. The Capstone project integrates the technical knowledge and skills acquired throughout the Code Labs curriculum, empowering students to design, build, and deploy innovative systems that address practice needs. Throughout this experience, students develop essential competencies in team-building, project management, oral and written communication, and problem-solving.

EARLY CHILDHOOD EDUCATION**ECE1000 (3 - 0) 3 cr. hrs.****Intro to Early Childhood Education**

Focuses on research-based theories that have affected the evolution of current developmentally-appropriate curriculums used in early care and education programs. The student will explore the history and application of those curriculums based on current theory and practice. Considerations of planning the environment for age birth to eight will be explored. Developmental effects of the dynamics of the physical, temporal, and human characteristics within the learning environment will be included in the planning process. An introduction to planning of the environment through assessing the individual needs of the child will be explored. The assessment and record keeping skills will be identified through the utilization of observation in a Developmentally Appropriate (DAP) environment. Five hours of required observations is assigned throughout the semester. NOTE: Assigned artifacts reflecting the core competencies will be collected for the capstone course.

ECE1020 (3 - 0) 3 cr. hrs.**Guidance Altern for Young Children**

The main focus of this course is to identify positive developmentally appropriate practice (DAP) discipline and redirection of children from birth through age eight years. Guidance skills, observation tools, and techniques of redirecting behavior will be explored. Children's traumas, fears, and negative environmental issues will be identified and assessed. The prosocial environment will be identified through the utilization of observation in a Developmentally Appropriate (DAP) environment. Five hours of required observations is assigned throughout the semester. NOTE: Assigned artifacts reflecting the core competencies will be collected for the capstone course.

ECE1040 (3 - 0) 3 cr. hrs.**Early Child Hlth/Safety/Nutrition**

Focus on young children's (age birth through eight years) healthy environment. The child's environment includes all aspects that effect the child's health, safety and nutrition. National Health Standards are used to plan the child's healthy environment. Learning concepts are based on the response to the standards in an effort to provide an optimal learning environment for the young child. The healthy learning environment and record-keeping techniques required for state

licensing will be identified through the utilization of observation in a Developmentally Appropriate (DAP) environment. Five hours of required observations are assigned throughout the semester. CPR First Aid certification is mandatory for class completion. NOTE: Assigned artifacts reflecting the core competencies will be collected for the capstone course.

ECE1060 (3 - 0) 3 cr. hrs.**Child Dev Associate Credential Prep**

Prerequisites: ECE1000, ECE1020, and ECE1040 with a minimum grade of C, and meet all CDA competency standards including a resource collection of required artifacts in all three courses. Focuses on final preparation for the nationally-accredited Child Development Associate credential. Students will begin to build the professional resource collection that exemplifies CDA standards. Coursework also includes writing competency standards required in the CDA 2.0. The student will complete the CDA 2.0 application to the Council for Professional Development. The Professional Development specialist will conduct final observations and evaluations of the student in the student's child care setting. In addition, the student will provide feedback opportunities for parents in the program. Students will complete a credentialing exam.

ECE1200 (3 - 0) 3 cr. hrs.**Caring for School Age Children**

Intended to provide a developmental overview of children ages five to twelve years of age. It focuses on after school and summer care of school-age children. The child's learning environment will be identified through the planning and implementation of school-age activities, materials and equipment needed in the program. The students will plan and implement DAP lessons and activities. The family and community involvement will be used to prepare the student for needed resources to enhance the program's effectiveness in caring for school age children. The learning environment will be identified through the utilization of observation in a Developmentally Appropriate (DAP) environment. Five hours of required observations are assigned throughout the semester. NOTE: Assigned artifacts reflecting the core competencies will be collected for the capstone course.

ECE1220 (3 - 0) 3 cr. hrs.**Home Visits**

The main focus of the course is to educate and prepare the early-care and education provider/teacher in developing partnerships with parents and family through developmental collaborations. Family-centered philosophy and practice will be used to develop strong partnerships between the program and home environments. The family status and stress will be explored and its implications for educators to prepare for home visits. Working with families from diverse cultures and the teacher's attitudes toward those diversities will be addressed. Working with children with special needs and their families along with the challenges and concerns will also be explored. NOTE: Assigned artifacts reflecting the core competencies will be collected for the capstone course.

ECE2002 (2 - 4) 4 cr. hrs.**Practicum Classroom Experiences**

Prerequisites: ECE1000, ECE1020, ECE1040, and a minimum of one ECE 2000-level course with a minimum grade of C. It is recommended that students take this course the semester before qualifications have been met for graduation. Focuses on the application of learned concepts of planning, observing, and documenting the growth and development of young children. The student will plan and apply the learned concepts in a (15-week) four-hour practicum classroom experience and (2 hours) 15-week (50 minute) lecture. The practicum experiences will apply to preschool children 3 to 5 years of age. Children's portfolios will be examined as a method to assess the success of the child. The early childhood practicum will be completed in a Developmentally Appropriate (DAP) environment. Five hours of required practicum classroom experience is assigned each week for a total of forty hours. NOTE: Assigned artifacts reflecting the core competencies will be collected for the capstone course.

ECE2020 (3 - 0) 3 cr. hrs.**Emerging Language and Literacy**

Explores the development of language from birth through eight years; print-rich environments and print awareness; and pre-reading skills necessary for kindergarten preparedness. The integration of language experience and the systematic approach to several teaching techniques are identified throughout the course to prepare the early care and education teacher for working with young children birth through eight years of age. The emerging language and literacy techniques will be identified through the utilization of observation in a Developmentally Appropriate (DAP) environment. Five hours of required observations are assigned throughout the semester. NOTE: Assigned artifacts reflecting the core competencies will be collected for the capstone course.

ECE2040 (3 - 0) 3 cr. hrs.**Home, School and Family**

Explores the positive relationships between the early childhood teachers, program staff, parents/families, and the community. Collaboration techniques; communication skills; and parent/provider/child/community partnerships are the primary focus of the course. Family partnerships will be explored through the utilization of observation in a Developmentally Appropriate (DAP) environment. Five hours of required observations are assigned throughout the semester. NOTE: Assigned artifacts reflecting this course competencies will be collected for the capstone course.

ECE2300 (1 - 1) 1 cr. hrs.**Professional Portfolio Assessment**

Prerequisites: ECE1000, ECE1020, ECE1040, and a minimum of one ECE 2000-level course with a minimum grade of C. Intended to assess the technical skills of training and educating students in the field of early care and education. The portfolio is a required final assessment of the student's work in the child development degree plan. The collected and assigned artifacts for the portfolio assessment are illustrations of course competencies met

throughout the AAS in Child Development. Note: The student must have completed 45 hours in AAS/Child Development or last semester before graduation.

EDUCATION**EDU1100 (3 - 0) 3 cr. hrs.****Psychology of Adolescence**

Prerequisites: PSY1130 with a minimum grade of C and one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Study factors and issues of the period from puberty to adulthood with emphasis upon conditions leading to optimal development. Students must earn a minimum grade of B in all education courses with an EDU prefix.

EDU1300 (3 - 0) 3 cr. hrs.**Child Development**

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Must earn a B or higher in all education courses with an EDU prefix. Explore development from conception through adolescence. Review theories related to the four areas of development: cognitive, physical, language, and social/emotional. Explore the relationships and effects of the environment on the developmental areas as they apply to the developing child. Brain research will be reviewed at each area of development. This will assist in the understanding of how the learning process is affected by the child's learning environment.

EDU2030 (3 - 0) 3 cr. hrs.**Found. of Ed. in a Diverse Society**

Prerequisite: ENG1330 and PSY1130 with a minimum grade of C, and a minimum of 15 earned degree applicable semester hours (excluding developmental). Examine educational practice from diverse historical, philosophical, sociological, economic, and legal perspectives. Will address issues of educational equity, sociocultural influences on teaching and learning, and how teachers and schools can contribute to interpersonal and intercultural understanding and respect, social justices, and democratic citizenship. Students will explore the nature of school environments, the fundamental goals of education in the American public school, English Language Learners, the relationship between school and a diverse society, the organization of school curricula, and characteristics of effective schools and instruction in grades P-12.

EDU2100 (3 - 0) 3 cr. hrs.**Teach Profession w/Field Experience**

Prerequisites: ENG 1330 with a minimum grade of C, and one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Corequisite: EDU2030 or EDU2040. Provides students an opportunity to observe teaching and learning for 30 hours or more in P-12 classrooms. Explore the requirements for teacher preparation and certification. Students will examine characteristics of effective teaching. Designed to assist students in determining if a career in teaching is an appropriate goal. Students must earn a minimum grade of B in all education courses with an EDU prefix.

EDU2150 (3 - 0) 3 cr. hrs.**Multicultural Education**

Examine the multicultural context of education and prepare students to understand and teach learners from diverse backgrounds, with diverse characteristics, and with differing social identities. Will address issues of educational equity, sociocultural influences on teaching and learning, and how teachers and schools can contribute to interpersonal and intercultural understanding and respect, social justices, and democratic citizenship.

EDU2280 (3 - 0) 3 cr. hrs.**Educational Technology**

Prerequisite: EDU2030 or EDU2040 with a minimum grade of B. Must be admitted to the AAT program by separate application through the Education Department. Integrate instructional technology into P-12 classrooms and will study a variety of software programs, telecommunication tools, and presentation and assistive technology. Focus will be on social, ethical, legal, and human issues surrounding the use of technology.

EDU2320 (3 - 0) 3 cr. hrs.**Educational Psychology**

Prerequisites: EDU2030 or EDU2040 with a minimum grade of B. Must be admitted to the AAT program by separate application through the Education Department. Relate the application of psychological principles to teaching, learning, and assessment and the educational practice in P-12 classrooms. Focuses on the learner and the learning process, teacher characteristics, and classroom processes that increase student motivation. Student diversity and appropriate instructional strategies for students with special needs will also be introduced. Students must earn a minimum grade of B in all education courses with an EDU prefix.

EDU2400 (3 - 0) 3 cr. hrs.**Infant/Toddler Curriculum Methods**

Prerequisites: EDU1300 with a minimum grade of B and one of the following: (1) a

minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Examine the areas of development during a child's first three years of life as well as the current theories and practices of the developmental domains during infancy and toddlerhood. Meet developmental needs by planning for the environment with appropriate materials and equipment. The growth and development of the young child is applied through active learning activities. An early childhood curriculum is used to determine the choices of developmentally-appropriate activities and lesson plans. Observation of infants and toddlers during their daily routines and activities are documented and used to prepare the student for working with young children. Students must earn a minimum grade of B in all education courses with an EDU prefix.

EDU2420 (3 - 0) 3 cr. hrs.

Org Mgt Early Childhood Programs

Prerequisites: EDU1300 with a minimum grade of B and one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Emphasizes the operation and management of early childhood programs. Program goals, objectives and outcomes are evaluated in order to provide a quality program to meet the needs of the community. Issues related to staffing, curriculum, and program planning are identified as a part of the program's goals and outcomes. The focus of planning and budgeting for the learning environment is addressed through the assessment of staffing needs, program materials and equipment. The needs of the community are also addressed as a part of the planning process. Students must earn a minimum grade of B in all education courses with an EDU prefix.

EDU2500 (3 - 0) 3 cr. hrs.

Education of Exceptional Learner

Corequisite: EDU2320.
An introduction to exceptional learners and their education in grades P-12. Students will attain knowledge, skills, and dispositions that will enable them to work effectively with exceptional learners in general education or special education.

EDU2520 (3 - 0) 3 cr. hrs.

Art, Music, & Phys Ed in Elem Educ

Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3)

or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.

Explore the vital role that art, music, and physical education play in supporting childhood development within diverse communities. Students will develop the knowledge and skills needed to effectively integrate art, music, and physical education into early childhood and elementary education classrooms. By the end of the course, students will be equipped to create dynamic, culturally responsive learning environments that nurture the whole child through the powerful mediums of art, music, and physical education.

EDU2530 (3 - 0) 3 cr. hrs.

Reading & Writing for Elem Educator

Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Provides a comprehensive overview of English grammar. Students will identify/differentiate parts of speech, analyze sentence structure, and recognize Standard American English.

ELECTRICAL/ELECTRONIC TECH

EEE1550 (3 - 0) 3 cr. hrs.

Electrical Systems

An introductory study of basic electrical theory including OHM's Law as it relates to AC/DC circuits, series/parallel/combinational circuits, electrical measurement, inductance/capacitance, and transformers.

EEE1580 (3 - 0) 3 cr. hrs.

Practical Electronics I

Prerequisites: EEE1550 with a minimum grade of C or instructor consent. A combination of lecture and lab experiences involving fundamental knowledge of motor control wiring, single and three-phase electrical systems.

EEE1600 (3 - 0) 3 cr. hrs.

Practical Electronics II

Prerequisite: EEE1580 with a minimum grade of C or instructor consent. A continuation of EEE1580 covering complex electrical circuits and AC/DC drive systems.

EEE1710 (3 - 0) 3 cr. hrs.

National Electric Code

An independent study course designed to

introduce students to use the national electric code as a reference tool.

EEE1910 (3 - 0) 3 cr. hrs.

Electronic Servicing

Prerequisite: EEE1580 with a minimum grade of C. Teaches the basic principles of process automation and demonstrate the application of these principles on modern industrial practice. This is an introductory or first-level course. Intended to be both theoretical and practical to show the basic concepts of process control theory and troubleshooting.

EEE1970 (3 - 0) 3 cr. hrs.

Programmable Logic Controllers

Offers a learning opportunity that covers a wide range of applications of electronics in the fields of automation and fluid power control.

EEE2040 (3 - 0) 3 cr. hrs.

Digital Electronics I

Prerequisites: TEC1900, MAT1230, or MAT1240 or higher with minimum grade of C or instructor consent. The study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discrete voltages or logic levels. This distinction allows for greater signal speed and storage capabilities and has revolutionized the world of electronics. Exposes students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

ENGLISH

ENG0920 (3 - 0) 3 cr. hrs.

Introduction to College Writing

Prerequisites: ACT English score 0-14, Accuplacer Next Generation writing score of 200-236, AND one of the following: (1) a minimum score of 18 on the ACT reading, or Accuplacer Next Generation reading score of 250, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average, or (3) a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG0750 or RDG0900, or (5) have earned 24 college-level semester credit hours. Emphasizes developing sentences, paragraphs, and brief essays. Includes a thorough review of mechanics, usage, and grammar through competency-based instruction.

ENG0930 (3 - 0) 3 cr. hrs.

Strategies for Composition

Prerequisites: One of the following: (1) an ACT English score of 15 -17, or Accuplacer Next Generation writing score of 237-249, or (2) ENG0920 or ENG0960 or (3) modules ENG0210, ENG0220, ENG0230 with a minimum grade of C AND concurrent enrollment in ENG1330.

Delivers supplementary instruction for English Composition I assignments and emphasizes paragraph development, sentence structure, grammar, and diction. Reinforces academic reading and writing strategies useful for college-level work in general and for English Composition II in particular. Pass/No Pass grading scale.

ENG1330 (3 - 0) 3 cr. hrs.

English Composition I

MOTR ENGL100



Prerequisite: One of the following: (1) a minimum ACT English score of 18, or minimum Accuplacer Next Generation writing score of 250, or minimum Accuplacer Writeplacer score of 5, or (2) an ACT English score of 15-17, or Accuplacer Next Generation writing score of 237-249, AND a 3.0 cumulative high school grade point average or (3) concurrent enrollment in ENG0930 or (4) ENG0970 or modules ENG0240, ENG0250 & ENG0260 with a minimum grade of C.

A purpose-based writing course designed to guide the student through writing based on the rhetorical situation. Importance is placed on mastery of writing necessary to the student's education and career. Emphasis will be placed on critical thinking necessary to a writing process and producing clear, organized, and well-developed writing. Instruction includes basic research skills, MLA guidelines, mechanics, usage, and grammar.

ENG1340 (3 - 0) 3 cr. hrs.

English Composition II

MOTR ENGL200



Prerequisite: ENG1330 with a minimum grade of C. Emphasizes argument, critical thinking, research and documentation. Students will be expected to read critically and synthesize information cogently and effectively.

ENG1360 (3 - 0) 3 cr. hrs.

Creative Writing

MOTR PERF106 - 2019



Prerequisite: ENG1330 with a minimum grade of C. An introduction to writing short fiction, creative nonfiction and poetry. Students will study anthologized/representative writers while developing their own style and voice. Special focus will be placed on providing criticism in a workshop setting and revising writing multiple times to produce polished work.

ENG1440 (3 - 0) 3 cr. hrs.

Public Speaking

MOTR COMM110



Prerequisite: Must have met one of the following: (1) minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation Reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average, (3) or a minimum grade of C in RDG 0900, ENG 0990, or ENG 0090, or (4) have earned 24 college-level semester credit hours. Emphasizes effective communication in public situations through the design and delivery of informal speeches, open forum discussions, and practice in impromptu and extemporaneous speaking.

ENG1570 (3 - 0) 3 cr. hrs.

Intro Lit/Prose/Poetry

MOTR LITR100



Prerequisite: ENG1330 with a minimum grade of C. An introductory survey of the prose forms of literature, primarily short story, and drama, as well as the basic methods of poetry. Special attention is given to literary forms and terminology. Emphasis is also placed on developing skills in critical reading and the attitude needed for appreciating serious literature. A strong emphasis will be placed on reading and discussion.

ENG1670 (3 - 0) 3 cr. hrs.

Interpersonal Communications I

MOTR COMM120



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation Reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation Reading score of 240, AND a 2.8 cumulative high school grade point average, or (3) a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) have earned 24 college-level semester credit hours. A "whole person" approach to oral communication between individuals using empathy, personal awareness, concern for others, and respect for individual differences. Will engage in "what if" discussions of everyday situations as well as emotionally sensitive interactions. Focus will be placed on thinking about the "how" and "why" of person-to-person contact. Open to all students.

ENG2330 (3 - 0) 3 cr. hrs.

English Literature I

MOTR LITR102A



Prerequisite: ENG1330 with a minimum grade of C. A survey study of major authors and their works from the early Middle Ages through the eighteenth century. Major figures studied include Chaucer,

Shakespeare, Milton and Pope. A strong emphasis will be placed on reading and discussion.

ENG2340 (3 - 0) 3 cr. hrs.

English Literature II

MOTR LITR102B



Prerequisite: ENG1330 with a minimum grade of C. A survey study of major authors from the nineteenth century Romantic writers through the twentieth century. Authors studied include Austen, Wordsworth, Byron, Tennyson, Browning, Yeats, Conrad, Joyce, and Orwell. A strong emphasis will be placed on reading and discussion.

ENG2430 (3 - 0) 3 cr. hrs.

American Literature I

MOTR LITR101A



Prerequisite: ENG1330 with a minimum grade of C. The primary purpose of this course is to help students understand and appreciate early American literature. Covering the Puritan Period, Revolutionary Period, and Romantic Period, nonfiction essays, journals, short stories, and poetry will be studied. Classes are discussion oriented, with lectures provided to introduce historical information, facts about the authors, and terminology peculiar to particular periods and genres. A strong emphasis will be placed on reading and discussion.

ENG2440 (3 - 0) 3 cr. hrs.

American Literature II

MOTR LITR101B



Prerequisite: ENG1330 with a minimum grade of C. The primary purpose of this course is to help students understand and appreciate American literature from the late nineteenth century to the late twentieth. Specific periods covered are the Realistic/Naturalist Period, Modernist Period, and Post-Modernist Period. Classes are discussion oriented, with lectures provided to introduce historical information facts about the authors, and terminology peculiar to particular periods and genres. A strong emphasis will be placed on reading and discussion.

ENG2492 (3 - 0) 3 cr. hrs.

Women's Literature

MOTR LITR106



Prerequisite: ENG1330 with a minimum grade of C.

Focuses on the ideas, experiences, and perceptions of women in various literary genres and time periods. Explores the political, historical, social, and religious contexts in which women live and write. A strong emphasis will be placed on reading and discussion.

ENG2500 (3 - 0) 3 cr. hrs.

Multicultural Literature

MOTR LITR105



Prerequisite: ENG1330 with a minimum grade of C. Designed to give students an introduction to and appreciation of cultures different from their own through the reading of stories and poetry by authors who represent various worldwide cultures. A strong emphasis will be placed on reading and discussion.

ENG2520 (3 - 0) 3 cr. hrs.

Children's Literature

Prerequisite: EDU2030 or EDU2040 or ECE1000 with a minimum grade of C and acceptance into the AAT or AAS in Child Development Program. Designed to acquaint the elementary teacher with strategies for promoting literacy in children, identifying criteria for selecting quality children's literature, and formulating techniques for using literature in the classroom.

ENG2530 (3 - 0) 3 cr. hrs.

Young Adult Literature

Prerequisites: ENG1330 AND EDU2030 or EDU2040 or ECE1000 with a minimum grade of C, AND acceptance into AAT program or AAS in Child Development. Designed for secondary education majors with course content focusing on poetry, prose, and novels for young adults. Special attention is given to literary forms and terminology. Emphasis is also placed on developing skills in critical reading and attitude needed for understanding and appreciating literature.

ENG2580 (3 - 0) 3 cr. hrs.

Poetry and the Human Experience

Prerequisite: ENG1330 with a minimum grade of C. Investigates the impact of culture on poetry and frequently the impact of poetry on culture. The work of poets from a variety of cultures around the world and from a number of American subcultures will be examined. In addition to addressing the connection between culture and poetry, basic literary styles and forms will be studied. A strong emphasis will be placed on reading and discussion.

ELECTRICAL TECHNOLOGY

ETT1030 (3 - 0) 3 cr. hrs.

Intro Elect Tech Materials&Supplies

A study of electrical wire, electrical boxes, conduits, load centers, overcurrent protection, and

materials and supplies used in residential, commercial, and industrial applications.

ETT1200 (3 - 2) 3 cr. hrs.

Residential Circuits

A lecture/laboratory study of the installation of complete electrical systems for residential application.

ETT1300 (3 - 2) 3 cr. hrs.

Commercial Circuits

A lecture/laboratory study of the installation of complete electrical systems for commercial structures, to include high bay and outdoor lighting systems and power distribution for commercial applications.

ETT1400 (3 - 0) 3 cr. hrs.

Industrial Circuits

A study of the planning, installation, troubleshooting, and repair of industrial control systems, including motor controls and programmable control systems used in industrial settings.

ETT1420 (3 - 2) 3 cr. hrs.

Electrical Construction

This course will address the knowledge and skills necessary to properly use common hand and power tools used in the field of electrical technology, to include conduit bending, conduit threading, wire pulling, drilling structural members, use of hole punching and drilling equipment, electrical motor and transformer selection and installation, and equipment and materials.

ETT1700 (0 - 6) 3 cr. hrs.

Electrical Tech Internship I

A supervised occupational experience with a local electrician. Students shall perform approximately 90 hours of on-the-job training under the direction of a qualified supervisor in a location approved by the instructor.

ETT1720 (0 - 6) 3 cr. hrs.

Electrical Technology Internship II

Prerequisite: ETT1700 with a minimum grade of C.

A supervised occupational experience with a local electrician. Students shall perform approximately 90 hours of on-the-job training under the direction of a qualified supervisor in a location approved by the instructor.

FIBER OPTICS TRAINING

FOT1000 (2 - 2) 4 cr. hrs.

Fiber Optic Fundamentals

Covers fiber optic basics, OSHA training, fiber optic networks and components, installation, and testing, fiber cable types as well as what

structured cabling is and how it is used. This course will include a lab component that will allow students to gain hands-on experience.

GEOGRAPHY

GEO1130 (3 - 0) 3 cr. hrs.

Regional World Geography

MOTR GEOG101



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Explore the physical, cultural, economic, and political geography of the world's major regions including: The Americas, Asia, Europe, North Africa and Southwest Asia and Sub-Sahara Africa.

GUIDANCE

GUI1010 (1 - 0) 1 cr. hrs.

First Year Seminar

Required of all freshmen with a catalog term/year of fall 2018 pursuing an AA, AGS, or AAT degree. Orients students to college life to make success in college achievable. Designed to increase awareness of resources on campus, teach behavioral expectations of college, and teach skills for academic success, such as note taking, test taking, study skills, time management, decision making, and goal setting.

GUI1960 (1 - 1) 1 cr. hrs.

Career Planning

Designed to increase career development awareness by assisting students with choosing a career or college major through interest, ability, and workplace value assessments. The results provide a framework for career planning and exploration through a variety of sources including computerized career information systems, resource materials and assessments, occupation and employment opportunity research.

HISTORY

HIS0000 (0 - 0) 0 cr. hrs.

MO Higher Education Civics Exam

State requirement for all Missouri college students. Covers federal and state governments. Students must successfully complete the exam with a minimum score of 70%.

HIS1100 (3 - 0) 3 cr. hrs.

World Civilization I

MOTR HIST201 - 2020



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Gain a multicultural and comparative understanding of the development of major world civilizations from the ancient period until 1500. World Civilization I and World Civilization II are not sequential courses; students may take either.

HIS1130 (3 - 0) 3 cr. hrs.

Western Civilization I

MOTR WCIV101



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Study the evolution of Western Civilization from the development of the earliest civilizations to the Age of Absolutism. Western Civilization I and Western Civilization II are not sequential courses; students may take either one first.

HIS1140 (3 - 0) 3 cr. hrs.

Western Civilization II

MOTR WCIV102



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Study the main problems of the western world from the Age of Absolutism to the present time. Western Civilization I and Western Civilization II are not sequential courses; students may take either one first.

HIS1190 (3 - 0) 3 cr. hrs.

History of Christianity

Prerequisite: Must have met one of the

following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Study the development of Christian thought and institutions from late antiquity through the Reformation and beyond.

HIS1230 (3 - 0) 3 cr. hrs.

American History I

MOTR HIST101



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Study the political, economic, constitutional, diplomatic, social and cultural developments of the United States through the Reconstruction period. American History I and American History II are not sequential courses; students may take either one first.

HIS1240 (3 - 0) 3 cr. hrs.

American History II

MOTR HIST102



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Study the political, economic, constitutional, diplomatic, social and cultural developments of the United States from the Reconstruction period to the present. American History I and American History II are not sequential courses; students may take either one first.

HIS1260 (0 - 0) 3 cr. hrs.

Topics in American History I

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990,

or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Explore in depth a particular area, topic, or perspective on American history. Topics will vary each semester, according to instructor expertise and student demand.

HIS1270 (0 - 0) 3 cr. hrs.

Topics in American History II

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Explore in depth a particular area, topic, or perspective on American history. Topics will vary each semester, according to instructor expertise and student demand.

HIS1520 (3 - 0) 3 cr. hrs.

World Civilization II

MOTR HIST202 - 2020



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Explore multicultural and comparative developments of major world civilizations from approximately 1500 until the present. World Civilization I and World Civilization II are not sequential courses; students may take either.

HEALTH RELATED TECHNOLOGY

HLT1005 (2.5 - 0.5) 3 cr. hrs.

Intro to Health Professions

Corequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Provides a comprehensive introduction to the diverse world of healthcare professions. Students will explore a wide range of career options within the Allied Health fields and the educational requirements, licensing procedures, and professional responsibilities associated with each career path.

HLT1040 (Arr - Arr) 4 cr. hrs.**Basic Electrocardiography**

Prerequisites: CIS1050 or CIS1750 with a minimum grade of C or instructor consent, and minimum ACT math score of 15, AND one of the following: a minimum score of 18 on the ACT reading or, 250 on the Accuplacer Next Generation reading, or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or have earned 24 college-level semester credit hours. Must have a declared major of: EMT, Paramedic Technology, Radiology, or Nursing. Provides the rules and explanatory materials needed to understand, obtain and interpret basic single lead rhythms and 12-lead ECGs. Fulfills the needs of Allied Health students who strive to meet the basic requirements of advanced and critical care specialty training courses (e.g. ACLS, PALS, TNCC, ENPC, CATN, etc.) or seek additional Allied Health training for professional development.

HLT1050 (8 - 2) 10 cr. hrs.**Community Health Worker**

Community Health Worker program is a 10-credit hour, fully hybrid, 16-week course. The CHW program is designed for entry level healthcare workers and those already working in healthcare, seeking a career change and/or advancement. Upon successful course completion, students will be eligible for a state credential as a Community Health Worker and become job ready. Current healthcare providers (EMT's, Paramedic's, Nurses, etc.) completing the course will find a greater understanding of patient navigation and availability of health and community related resources. All didactic will be completed online. Final examination and presentation will be completed on-campus. The didactic component will be 128 hours with an additional 60 hours of clinical experience will be arranged between the student and instructor.

HLT1710 (Arr - Arr) 3 cr. hrs.**Emergency Med Tech Refresh**

Prerequisite: Graduate of a state accredited EMT program or licensed EMT. CIS1050 or CIS1750 is recommended. Must have basic computer and internet skills. Refresher/re-licensure course to enhance the knowledge and experience of the relicensing EMT. Designed to assure maintenance of a uniformity high level of proficiency in skills and training among EMTs and keep their training and competency equivalent to those of the EMT graduate. Provides basic content knowledge and skills practice integrating the theory behind the use of basic diagnostic and treatment procedure regarding the emergency management of acute & chronic medical illness and acute trauma related injury. Meets or exceeds all EMT level National EMS Education Standards and Bureau of EMS re-licensure requirements.

HLT1762 (Arr - Arr) 12 cr. hrs.**Emergency Medical Technician (EMT)**

Prerequisite: One of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point

average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Must be 18 year of age by completion of the program and have basic computer and internet skills. Must attend orientation on first class day. Provides basic instruction for delivering emergency medical services (EMS) as an EMT. Provided instruction: foundations of professional EMS practice, safety/wellness, ethics/legal issues, illness/injury prevention, pathophysiology, A & P, medical terminology, assessment, therapeutic communication, physical exam techniques, communications, documentation, diverse cultures, ventilatory management, resuscitation, medical/trauma emergencies. HAZMAT, geriatrics, pediatrics, ob/gyn, environmental, terrorism/disaster response, and MCI. Includes 210 didactic hours and clinical hours.: 36 ED/36 ambulance. Course completion will allow student to register for NREMT licensure exam and apply for a Missouri State EMT license. Exceeds EMT level NAEMSE and BEMS licensure requirements. First class day is mandatory orientation.

HLT1770 (3 - 0) 3 cr. hrs.**First Responder**

Prerequisite: CIS1050 or CIS1750 is recommended. Student must have basic computer and internet skills. Provides the basic instruction for fire department personnel, law enforcement officers, and other volunteers in the delivery of initial emergency medical services (EMS). Includes 100 hours of instruction with arranged practical lab. The EMR is often the first to arrive on scene of an emergency, such as a motor vehicle collision, a heart attack, or a disaster. EMRs provide medical assistance and aide other emergency care providers. The EMR course will help the student gain the knowledge, attitude, and skills necessary to be a competent, productive, and valuable member of the healthcare or public service team. Exceeds EMR level NAEMSE and BEMS licensure requirements.

HLT1772 (Arr - Arr) 6 cr. hrs.**Emergency Medical Responder**

Prerequisites: One of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. CIS1050 or CIS1750 is recommended. Student must be 18 before taking the national registry exam. Student must meet selection criteria and attend required orientation. Provides basic instruction for the delivery of emergency medical services. Upon successful completion, the student will be eligible to license as a Nationally Registered EMR.

HLT2080 (3 - 0) 3 cr. hrs.**First Aid**

Prerequisite: CIS1050 or CIS1750 is recommended. Must have basic computer and internet skills. Students will learn how to recognize and act in common emergency situations and to sustain life until professional help arrives. Content is based on the 2010 national guidelines for medical and trauma emergencies including CPR, choking care and using an automated external defibrillator (AED). Information on controlling bleeding, wounds and soft tissue injuries, extremity injuries and splinting, burns, and cold and heat emergencies, remote location first aid, and rescuing and moving victims will also be provided. A National Safety Council (NSC) completion card for First Aid and CPR completion card are available upon request with the course.

HLT2082 (3 - 0) 3 cr. hrs.**Wilderness First Aid**

Prerequisite: CIS1050 or CIS1750 is recommended. Must have basic computer and internet skills. Provides instruction for the delivery of First Aid in a wilderness setting. Students will learn how to recognize and act in common wilderness emergency situations and to sustain life until professional help is accessed. Content is based on the 2010 national guidelines for medical and trauma emergencies and includes: bleeding/wound care, animal attacks, bites and stings, heat/cold related illnesses, allergic reactions, dehydration, and waterborne illnesses. This class combines content presentation and resources with hands-on practical instruction and testing. Successful completion of a comprehensive written and practical exam will allow the student to receive certification as a Wilderness First Aid provider.

HLT2084 (3 - 0) 3 cr. hrs.**Pediatric First Aid**

Prerequisite: Access to high-speed internet is required. CIS1050 or CIS1750 is recommended. Student must have basic computer and internet skills. A hybrid course that teaches the unique approach to first aid for the pediatric patient.

HLT2350 (3 - 0) 3 cr. hrs.**Med Terminology I/Intro Pathology**

Prerequisite: One of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. A study of work analysis of medical terms. The general structure and function of body systems and some common pathological conditions will be covered.

HLT2360 (3 - 0) 3 cr. hrs.

Medical Terminology II

Prerequisite: HLT2350 with a minimum grade of C.

Continuation of HLT2350. Consists of individualized instruction to increase the working knowledge of medical terminology.

HLT2400 (Arr - Arr) 3 cr. hrs.

Intravenous Therapy

Prerequisites: Current Missouri-issued LPN license or be admitted to the practical nursing program.

Prepares students to perform I.V. therapy. Designed to teach knowledge, skills, competencies and administration of intravenous therapy, which will qualify the Licensed Practical Nurse to perform this procedure safely within the limits defined by the Missouri State Board of Nursing.

HLT2502 (4 - 0) 4 cr. hrs.

Introduction to Paramedic Science

Prerequisite: HLT1762 with a minimum grade of C or current Missouri or NREMT EMT license. An introduction and preview of advanced Paramedic practice for basic EMT level students. Introduces initial advanced level practice theory, psychomotor skills and content.

HLT2504 (2 - 2) 2 cr. hrs.

EMT Internship

Prerequisite: Must have current Missouri Emergency Medical Technician (EMT) license. An introduction and preview of advanced Paramedic practice for basic EMT level students. Introduces initial advanced level practice theory, psychomotor skills and content through 100 hours of field internship.

MATHEMATICS

MAT0935 (3 - 0) 3 cr. hrs.

Fundamentals of Mathematics

Prerequisite: ACT math score of 0-14, or Accuplacer Quantitative Reasoning, Algebra, and Statistics of 200-225, or Accuplacer Advanced Algebra and Functions of 200-223, or MAT0900 or MAT0920 with a minimum grade of C. Study college preparatory topics such as operations of fractions; ratio, proportion and percent; integers, sets, basic probability, basic algebra and properties of geometric shapes. Does not meet college-level math requirement or apply toward an associate degree.

MAT0940 (0 - 2) 1 cr. hrs.

Coreq: Quantitative Reasoning

Prerequisite: One of the following: (1) an ACT math score of 15-21, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 226-249, or Accuplacer Advanced Algebra and Functions score of 224-236, or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT1240 or (2)

MAT0930 or MAT0935 with a minimum grade of C.

Provides "just in time" instruction to assist with completing the college-level math requirement. P (pass)/NP (no pass) grading scale.

MAT0960 (0 - 2) 1 cr. hrs.

Coreq: Elementary Statistics

Prerequisite: One of the following: (1) an ACT math score of 15-21, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 226-249, or Accuplacer Advanced Algebra and Functions score of 224-236, or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT1260, or (2) MAT0930 or MAT0935 with a minimum grade of C.

Provides "just in time" instruction to assist with completing the college-level math requirement. P (pass)/NP (no pass) grading scale.

MAT0970 (0 - 2) 1 cr. hrs.

Coreq: PreCalc: Algebraic Reasoning

Prerequisite: One of the following: (1) an ACT math score of 19-21, or Accuplacer Quantitative Reasoning, Algebra, and Statistics score of 250-275, or Accuplacer Advanced Algebra and Functions score of 237-249, or MAT0930, MAT0935 or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT1270 or (2) a minimum high school grade point average of 3.0 AND a minimum ACT math score of 16-17, or Accuplacer Quantitative Reasoning, Algebra, and Statistics score of 245-249, or Accuplacer Advanced Algebra Functions score of 230-236, or MAT0930, MAT0935 or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT1270. Provides "just in time" instruction to assist with completing the college-level math requirement. P (pass)/NP (no pass) grading scale.

MAT1000 (Arr - Arr) 1 cr. hrs.

Metric Measurement

Designed to introduce students to scientific notation and use of the metric system. The U.S. standard system is reviewed. This course is recommended to be taken before or in tandem with physical and biological science courses, but may be taken by any student for elective credit. Includes measurements of length, area, volume, mass/weight, temperature, and time. Also includes conversion within and between metric and U.S. standard systems.

MAT1185 (4 - 0) 4 cr. hrs.

Fundamentals of Algebra

Prerequisite: One of the following: (1) an ACT math score of 15-18, or Accuplacer Quantitative Reasoning, Algebra, and Statistics score of 237-249, or Accuplacer Advanced Algebra and Functions score of 200-236 or (2) MAT0930, MAT0935 or MAT0950 with a minimum grade of C.

Prepares students for the rigors of college algebra. Learn the concepts of linear equations, inequalities, factoring, rational expressions, graphing equations and inequalities, systems of equations, roots and radicals and quadratic equations. Does not meet math requirement for the AA or AAT degrees.

MAT1240 (3 - 0) 3 cr. hrs.

Quantitative Reasoning

MOTR MATH120



Prerequisite: One of the following: (1) a minimum ACT math score of 22, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 250, or Accuplacer Advanced Algebra and Functions score of 237, or (2) a minimum high school grade point average of 3.0 AND a minimum ACT math score of 20, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 240-249, or Accuplacer Advanced Algebra and Functions score of 230-236 or (3) an ACT math score of 15-21, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 226-249, or Accuplacer Advanced Algebra and Functions score of 224-236, or MAT0930, MAT0935 or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT0940 or (4) MAT1130, MAT1180, MAT1185, MAT1215, MAT1225, MAT1230, MAT1260, or MAT1270 with a minimum grade of C.

Provides a comprehensive overview of the skills required to navigate the mathematical demands of modern life and prepares students for a deeper understanding of information presented in mathematical terms. Emphasis is placed on improving students' ability to draw conclusions, make decisions, and communicate effectively in mathematical situations that depend upon multiple factors.

MAT1260 (3 - 0) 3 cr. hrs.

Elementary Statistics

MOTR MATH110



Prerequisite: One of the following: (1) a minimum ACT math score of 22, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 250, or Accuplacer Advanced Algebra and Functions score of 237, or (2) a minimum high school grade point average of 3.0 AND a minimum ACT math score of 20, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 240-249, or Accuplacer Advanced Algebra and Functions score of 230-236 or (3) an ACT math score of 15-21, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 226-249, or Accuplacer Advanced Algebra and Functions score of 224-236, or MAT0930, MAT0935 or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT0960 or (4) MAT1130, MAT1180, MAT1185, MAT1215, MAT1225, MAT1230, MAT1240, or MAT1270 with a minimum grade of C.

Provides a comprehensive overview of the skills required to navigate the mathematical demands of modern life and prepares students for a deeper understanding of information presented in mathematical terms. Emphasis is placed on improving students' ability to draw conclusions, make decisions, and communicate effectively in mathematical situations that depend upon multiple factors. Develop an appreciation of the need for data to make good decisions and gain an understanding of the dangers inherent in basing decisions on anecdotal evidence rather than data. Will use appropriate data-collection methods and statistical techniques to support reasonable conclusions. The first course in statistics for

students whose college and career paths require knowledge of the fundamentals of the collections, analysis, and interpretation of data.

MAT1270 (3 - 0) 3 cr. hrs.

PreCalc: Algebraic Reasoning

MOTR MATH130



Prerequisite: One of the following: (1) a minimum ACT math score of 22, or Accuplacer Quantitative Reasoning, Algebra, and Statistics score of 276, or Accuplacer Advanced Algebra and Functions score of 250, or (2) a minimum high school grade point average of 3.0 and a minimum ACT math score of 18, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 270-275, or Accuplacer Advanced Algebra and Functions score of 240-249, or (3) an ACT math score of 19-21, or Accuplacer Quantitative Reasoning, Algebra, and Statistics score of 250-275, or Accuplacer Advanced Algebra and Functions score of 237-249, or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT0970 or (4) a minimum high school grade point average of 3.0 AND a minimum ACT math score of 16-17, or Accuplacer Quantitative Reasoning, Algebra, and Statistics score of 245-249, or Accuplacer Advanced Algebra and Functions score of 230-236, or MAT0930, MAT0935 or MAT0950 with a minimum grade of C AND concurrent enrollment in MAT0970 or (5) MAT1130, MAT1180 or MAT1185 with a minimum grade of C.

Covers the comprehensive and rigorous concepts and techniques of algebra including: linear, rational, quadratic and other types of functions (properties, graphs, inverses); exponential and logarithmic functions; solving systems of equations of three variables.

MAT1370 (3 - 0) 3 cr. hrs.

Pre-Calculus: Trig & Geom Reasoning

Prerequisite: MAT1230 or MAT1270 with a minimum grade of C.

Study triangles and trigonometric and circular functions and their graphs, angle measure (degree and radians); trigonometric identities and equations; solving right and general triangles; inverse trigonometric functions and equations; geometric formulas and their applications. Introduces vector applications and polar coordinates.

MAT1550 (3 - 0) 3 cr. hrs.

Applied Calculus

Prerequisite: A minimum ACT math score of 27, or Accuplacer Next Gen Quantitative Reasoning, Algebra & Statistics of 276, or a minimum grade of C in MAT1270. Designed for students majoring in business, social or life sciences. Topics include limits, finding derivatives of functions (by definition and differentiation techniques), including exponential and logarithmic functions, utilizing derivatives to sketch graphs of functions and integrations. Applications will be emphasized.

MAT1650 (5 - 0) 5 cr. hrs.

Analytic Geometry and Calculus I (Fall)

Prerequisite: A minimum grade of C in MAT1230 and MAT1330 or MAT1270 and MAT1370.

Provides a study of algebraic applications to geometry and the basic concepts of the calculus. Includes limits and their properties; differentiation of algebraic and transcendental functions (by using limits and differentiation rules); applications of differentiation, including curve sketching and optimization problems; and an introduction to integration, including definite and indefinite integrals.

MAT2150 (5 - 0) 5 cr. hrs.

Analytic Geometry and Calculus II (Spring)

Prerequisite: MAT1650 with a minimum grade of C.

A continuation of Calculus I. Topics include further techniques of integration; applications of integration, including finding the area of a region between two curves, volume, and surfaces of revolution; sequences and series; conic sections; polar, cylindrical, and spherical coordinates; vectors and analytic geometry in space.

MAT2250 (5 - 0) 5 cr. hrs.

Analytic Geometry and Calculus III (Fall)

Prerequisite: MAT2150 with a minimum grade of C.

The third course in the calculus sequence dealing primarily with functions of several variables. Includes vector-valued functions; partial derivatives; motion in space, multiple integration; and vector calculus.

MAT2330 (3 - 0) 3 cr. hrs.

Differential Equations (Spring)

Prerequisite: MAT2250 with a minimum grade of C.

Provides an introduction to the study of differential equations. Includes a study of first-order and higher-order differential equations and techniques of solution; modeling with first-order differential equations; and the Laplace Transform.

MODERN FOREIGN LANGUAGE

MFL1370 (3 - 0) 3 cr. hrs.

Elementary Spanish I

MOTR LANG103



Prerequisite: One of the following: (1) a minimum ACT English score of 18, or minimum Accuplacer Next Generation writing score of 250, or minimum Accuplacer Writeplacer score of 5, or (2) an ACT English score of 15-17, or Accuplacer Next Generation writing score of 237-249, AND a 3.0 cumulative high school grade point average or (3) concurrent enrollment in ENG0930 or (4) ENG0970 or modules ENG0240, ENG0250 & ENG0260 with a minimum grade of C.

An introduction to the Spanish language and to the Hispanic culture. Practice all four language

skills, with special emphasis on conversation.

MFL1470 (3 - 0) 3 cr. hrs.

Elementary Spanish II

MOTR LANG104



Prerequisite: MFL1370 with a minimum grade of C. A continuation of MFL1370. By the end of the second semester, all major language structures will have been introduced.

MFL1700 (3 - 0) 3 cr. hrs.

American Sign Language I

MOTR LANG105 - 2019



Prerequisite: One of the following: (1) a minimum ACT English score of 18, or minimum Accuplacer Next Generation writing score of 250, or minimum Accuplacer Writeplacer score of 5, or (2) an ACT English score of 15-17, or Accuplacer Next Generation writing score of 237-249, AND a 3.0 cumulative high school grade point average or (3) concurrent enrollment in ENG0930 or (4) ENG0970 or modules ENG0240, ENG0250 & ENG0260 with a minimum grade of C.

Introduction to American Sign Language (ASL) and deaf culture. Focuses on functions or communicative purposes of everyday interaction. Grammatical structure of ASL and appropriate behaviors and awareness of deaf culture. Acquisition of a basic level of communicative competency in American Sign Language.

MFL1720 (3 - 0) 3 cr. hrs.

American Sign Language II

MOTR LANG106 - 2019



Prerequisites: MFL1700 or DCS1000 with a minimum grade of C. A continuation of MFL1700. Develop a more advanced vocabulary and grammatical usage of American Sign Language (ASL). Increase knowledge of deaf culture conversational strategies and the ability to shift between English and ASL with more accuracy.

MFL2230 (3 - 0) 3 cr. hrs.

Intermediate Spanish I

Prerequisites: MFL1370 and MFL1470 with a minimum grade of C or the equivalent (four years of high school study). Review the fundamentals of grammar and elaboration of the major language structures. Special emphasis on writing and conversation.

MFL2250 (3 - 0) 3 cr. hrs.

Intermediate Spanish II

Prerequisite: MFL 1370 and MFL1470 with a

minimum grade of C or the equivalent (four years of high school study).

A continuation of MFL2230. Develop the ability to converse in Spanish in everyday situations, attain skills necessary for effective reading in Spanish, and write Spanish with a satisfactory level of accuracy. Learn about Hispanic culture and literature.

MANAGEMENT

MGT1590 (3 - 0) 3 cr. hrs.

Personal Finance

Prerequisites: MGT1800 with a minimum grade of C, or ACT math score of 15-18, or Accuplacer Next Generation Quantitative Reasoning, Algebra and Statistics of 237-249, or Accuplacer Next Generation Advanced Algebra and Functions of 200-236, or MAT 0990 with a minimum grade of C.

Designed to teach students to manage personal income. Students will become familiar with the techniques necessary to make choices when considering major purchases, insurance, borrowing, and other personal finance issues.

MGT1710 (3 - 0) 3 cr. hrs.

Human Resources Management

The principles and procedures of managing personnel in modern business, industrial enterprises, and government organizations. Special emphasis will be placed on planning and recruitment, selection, interviewing, training, appraising performance, compensation issues, incentive rewards and benefits, safety and health, employee rights and discipline, labor relations and collective bargaining/contract administration.

MGT1800 (3 - 0) 3 cr. hrs.

Business Mathematics

The application of basic mathematics to business transactions. Problems in buying, selling, interest, installment payments, insurance, commissions, taxes, depreciation and payroll are emphasized.

MGT2200 (Arr - Arr) 3 cr. hrs.

Business Internship

Prerequisite: Sophomore standing or instructor consent.
Supervised occupational experience in local business establishments.

MGT2540 (3 - 0) 3 cr. hrs.

Principles of Banking

A comprehensive introduction of banking in today's economy. Specific topics include the language, documents of banking, check processing, teller functions, deposit functions, bookkeeping, and bank loans and investments.

MEDICAL LABORATORY

MLT1500 (Arr - Arr) 2 cr. hrs.

Introduction to Laboratory Science

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.

Orients the student to the concepts encompassed in the laboratory environment, to include safe specimen handling, testing procedures, reporting results, basic quality control, laboratory organization and professionalism.

MLT2100 (Arr - Arr) 3 cr. hrs.

Immunology

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.

Consists of the principles and theories of antigen and antibody reactions and the immune system as related to diagnostic serologic procedures.

MLT2200 (Arr - Arr) 5 cr. hrs.

Clinical Chemistry and Urinalysis

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.
Introduces the student to methods of analysis of chemical components found in the human body, the testing methodologies for those constituents and the results as applied to normal and abnormal disease states.

MLT2500 (Arr - Arr) 5 cr. hrs.

Hematology and Coagulation

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.
Studies the cellular structures in blood, normal and abnormal cell development, alterations present in disease and the mechanisms of coagulation.

MLT2600 (Arr - Arr) 2 cr. hrs.

Phlebotomy

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.
Covers various procedures in performing venipuncture and other specialized collection

techniques in addition to laws and regulations for safe phlebotomy practices.

MLT2700 (Arr - Arr) 5 cr. hrs.

Clinical Immunohematology

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.

Consists of concepts, applications and discrepancies of blood group testing, screening and crossmatch procedures and identifying unexpected antibodies.

MLT2800 (Arr - Arr) 4 cr. hrs.

Clinical Microbiology

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.

Consists of the role of pathogenic bacteria and other microorganisms which will include bacterial culturing, differentiation and identification of human normal flora and disease-causing microorganisms.

MLT2900 (1 - 0) 1 cr. hrs.

Parasitology, Mycology and Virology

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.
Introduces the student to parasites, fungus and viruses and their role in human health and disease.

MLT2910 (Arr - Arr) 2 cr. hrs.

Hematology and Coagulation Practicu

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.
Supervised clinical practice coordinated by the Consortium, in the hematology lab of selected clinical affiliates.

MLT2920 (Arr - Arr) 2 cr. hrs.

Clinical Chemistry & Urinalysis Pra

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.

Supervised clinical practice coordinated by the Consortium, in the chemistry lab of selected clinical affiliates.

MLT2930 (Arr - Arr) 2 cr. hrs.

Clinical Microbiology Practicum

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.

Supervised clinical practice coordinated by the Consortium, in the microbiology lab of selected clinical affiliates.

MLT2940 (Arr - Arr) 2 cr. hrs.

Clinical Immunohematology Practicum

Prerequisite: Admission into the MHPC MLT Program; successful completion of required general education pre-requisite courses with a grade of "C" or better; minimum cumulative GPA of 2.5; successful completion of each course required in the MHPC MLT program with a grade of "C" or better.

Supervised clinical practice coordinated by the Consortium, in the immunohematology lab of selected clinical affiliates.

MUSIC

MSC1001 (1 - 1) 1 cr. hrs.

Concert Band I (Music Ensemble)

MOTR PERF102B



Prerequisite: Must have had at least some high school experience or equivalence on a band instrument.

A performing ensemble focusing on music from the concert band and wind band repertoire. A variety of musical styles will be rehearsed and performed each semester. Open to all students and community people who play an instrument.

MSC1002 (1 - 1) 1 cr. hrs.

Concert Band II

MOTR PERF102B - 2022



Prerequisite: MSC1001 with a minimum grade of C. A continuation of MSC1001.

MSC1011 (1 - 1) 1 cr. hrs.

Jazz Ensemble I

MOTR PERF102B - 2020



Prerequisite: Open to all students who play an instrument associated with

big band jazz.

A performing ensemble focusing on music from the jazz ensemble (Big Band) repertoire. A variety of styles will be rehearsed and performed each semester.

MSC1012 (1 - 1) 1 cr. hrs.

Jazz Ensemble II

MOTR PERF102B - 2020



Prerequisite: MSC1011 with a minimum grade of C. A continuation of MSC1011.

MSC1021 (1 - 1) 1 cr. hrs.

Jazz Combo I

MOTR PERF102B - 2020



Prerequisite: Open to all vocalists or instrumentalists through consent of the director.

A performing ensemble focusing on the small group sound of jazz. A major emphasis is placed on the student learning and applying the creative process of improvisation.

MSC1022 (1 - 1) 1 cr. hrs.

Jazz Combo II

MOTR PERF102B - 2020



Prerequisite: MSC1021 with a minimum grade of C. A continuation of MSC1021.

MSC1051 (1 - 2) 1 cr. hrs.

MAC Singers I

MOTR PERF102C



Prerequisite: Open to all students with the consent of the instructor. A performing ensemble focusing on the large choral ensemble repertoire (Soprano/Alto/Tenor/Bass).

MSC1052 (1 - 2) 1 cr. hrs.

MAC Singers II

MOTR PERF102C - 2022



Prerequisite: MSC1051 with a minimum grade of C. A continuation of MSC1051.

MSC1061 (1 - 2) 1 cr. hrs.

Chamber Singers I

Prerequisite: Audition only AND concurrent enrollment in MSC1051 or MSC1052 or MSC2053 or MSC2054.

A performing ensemble comprised of 8 to 16 vocalists who perform vocal music rated at a high difficulty level. The styles of music performed range from madrigals to vocal jazz.

MSC1062 (1 - 2) 1 cr. hrs.

Chamber Singers II

Prerequisite: MSC1061 with a minimum grade of C AND concurrent enrollment in MSC1051 or MSC1052 or MSC2053 or MSC2054.

A continuation of MSC1061.

MSC1071 (1 - 1) 1 cr. hrs.

Mineral Area Community Singers I

Prerequisite: Some previous experience of singing in a choir.

A performing ensemble focusing on the large choral ensemble repertoire (Soprano/Alto/Tenor/Bass). Open to all students and the community.

MSC1072 (1 - 1) 1 cr. hrs.

Mineral Area Community Singers II

Prerequisite: MSC1071 with a minimum grade of C. A continuation of MSC1071.

MSC1081 (1 - 1) 1 cr. hrs.

Guitar Ensemble I

Prerequisite: MSC1841 with a minimum grade of C or previous guitar experience. Intended to supplement higher-level guitar courses and provide the opportunity to perform arrangements for the guitar in the form of a small ensemble in a formal setting.

MSC1082 (1 - 1) 1 cr. hrs.

Guitar Ensemble II

Prerequisite: MSC1081 with a minimum grade of C. A continuation of MSC1081.

MSC1101 (1 - 1) 1 cr. hrs.

Aural Skills I (Fall)

A beginning study of aural, vocal and cognitive skills in the singing of music at sight. Emphasis will be placed upon identification of intervals, chords, scales, rhythms and melodies by their sound, the singing of melodies by sight and the reading of rhythms by sight. The study of major and minor keys, rhythm and simple and compound time will also be included.

MSC1102 (1 - 1) 1 cr. hrs.

Aural Skills II (Spring)

Prerequisite: MSC1101 with a minimum

grade of C.

The second level of aural, vocal and cognitive skills in the singing of music and rhythms at sight. This is a continuation of MSC 1101, with an emphasis placed upon extending studies into the areas of dominant chords, alto and tenor clefs, diatonic leaps in simple and compound meters.

MSC1201 (3 - 0) 3 cr. hrs.

Music Theory I (Fall)

A beginning study of music theory and harmony including intervals, triads, four-part diatonic harmony, connection of triads and their inversions.

MSC1202 (3 - 0) 3 cr. hrs.

Music Theory II (Spring)

Prerequisite: MSC1201 with a minimum grade of C.
A continuation of MSC1201 extending into the areas of seventh chords and nonharmonic tones.

MSC1301 (1 - 1) 1 cr. hrs.

Piano Skills I (Fall)

A complete orientation to the piano keyboard for music majors who are not pianists. This is a skills-based class where students learn to read piano music and play piano music through brief, fundamental, performance-based assessments.

MSC1302 (1 - 1) 1 cr. hrs.

Piano Skills II (Spring)

Prerequisite: MSC1301 with a minimum grade of C.
A complete orientation to the piano keyboard for music majors who are not pianists. This is a skills-based class where students learn to read piano music and play piano music through brief, fundamental, performance-based skills assessments. A continuation of skills from Class Piano I (MSC 1301).

MSC1400 (0 - 0) 0 cr. hrs.

Music Forum

Prerequisite: This class is for all Music Majors and those students who are currently enrolled in an "Applied" lesson. This course is a meeting of all music majors and music faculty every two weeks for one hour. During the hour students will perform material that they have been preparing in their individual "Applied" lesson. After each performance a student is orally critiqued by their peers.

MSC1401 (1 - 0) 1 cr. hrs.

Applied Voice I

Prerequisite: This class is open to all students through consent of the instructor only. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (voice specialization) or who have had previous comparable experience.

MSC1402 (1 - 0) 1 cr. hrs.

Applied Voice II

Prerequisite: MSC1401 with a minimum grade of C.
A continuation of MSC1401.

MSC1411 (1 - 0) 1 cr. hrs.

Applied Piano I

Prerequisite: Open to all students through consent of the instructor only.
A one-on-one, private lesson with the instructor. Primarily for students majoring in music (piano specialization) who have had previous comparable experience.

MSC1412 (1 - 0) 1 cr. hrs.

Applied Piano II

Prerequisite: MSC1411 with a minimum grade of C.
A continuation of MSC1411.

MSC1421 (1 - 0) 1 cr. hrs.

Applied Woodwinds I

Prerequisite: This class is open to all students through consent of the instructor only. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (woodwind specialization) or who have had previous comparable experience.

MSC1422 (1 - 0) 1 cr. hrs.

Applied Woodwinds II

Prerequisite: MSC1421 with a minimum grade of C.
A continuation of MSC1421.

MSC1431 (1 - 0) 1 cr. hrs.

Applied Brass I

Prerequisite: Open to all students through consent of the instructor only. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (brass specialization) or for those with previous comparable experience.

MSC1432 (1 - 0) 1 cr. hrs.

Applied Brass II

Prerequisite: MSC1431 with a minimum grade of C.
A continuation of MSC1431.

MSC1441 (1 - 0) 1 cr. hrs.

Applied Percussion I

Prerequisite: This class is open to all students through consent of the instructor only. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (percussion specialization) or with previous comparable experience.

MSC1442 (1 - 0) 1 cr. hrs.

Applied Percussion II

Prerequisite: MSC1441 with a minimum grade of C.
A continuation of MSC1441.

MSC1451 (1 - 0) 1 cr. hrs.

Applied Guitar I

Prerequisite: Open to all students through consent of the instructor only. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (guitar specialization) or with previous comparable experience.

MSC1452 (1 - 0) 1 cr. hrs.

Applied Guitar II

Prerequisite: MSC1451 with a minimum grade of C.
A continuation of MSC1451.

MSC1461 (1 - 0) 1 cr. hrs.

Applied Bass I

Prerequisite: This class is open to all students through consent of the instructor only. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (bass specialization) or with previous comparable experience.

MSC1462 (1 - 0) 1 cr. hrs.

Applied Bass II

Prerequisite: MSC1461 with a minimum grade of C.
A continuation of MSC1461.

MSC1471 (1 - 0) 1 cr. hrs.

Applied Composition I

Prerequisite: MSC1202 with a minimum grade of C. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (composition specialization) or with previous comparable experience.

MSC1472 (1 - 0) 1 cr. hrs.

Applied Composition II

Prerequisite: MSC1471 with a minimum grade of C.
A continuation of MSC1471.

MSC1481 (1 - 0) 1 cr. hrs.

Applied Jazz I

Prerequisite: This class is open to all students through consent of the instructor only. A one-on-one, private lesson with the instructor. Primarily for students majoring in music (jazz specialization) or with previous comparable experience.

MSC1482 (1 - 0) 1 cr. hrs.

Applied Jazz II

Prerequisite: MSC1481 with a minimum grade of C.
A continuation of MSC1481.

MSC1801 (3 - 0) 3 cr. hrs.

Appreciation of Music

MOTR MUSC100



Examines the nature of music as well as the development of Western music from the Middle Ages until the present time. This study provides the basis for the understanding and appreciation of music.

MSC1811 (3 - 0) 3 cr. hrs.

Appreciation of Jazz

MOTR MUSC100J



Students will study the major eras of jazz and the significant jazz artists from each period. They will be taught to recognize instruments by sound and sight; as well as to identify forms through listening alone.

MSC1821 (3 - 0) 3 cr. hrs.

History and Form of Rock Music

MOTR MUSC100RP



Covers the history of Rock/Pop music from the beginning of the Blues up until present time. Includes an emphasis on teaching the student to recognize common music forms through listening alone.

MSC1841 (3 - 0) 3 cr. hrs.

Beginning Guitar

Intended to present basic music reading and playing skills as they pertain to the beginning guitar player. Students will learn to play songs in the Country-Western, Rock n Roll, Blues, and Classical genres. Students will be required to play select pieces representative of each genre for unit and assessment purposes.

MSC2003 (1 - 1) 1 cr. hrs.

Concert Band III

MOTR PERF102B - 2022



Prerequisites: MSC1001 and MSC 1002 with a minimum grade of C.
A continuation of MSC1002.

MSC2004 (1 - 1) 1 cr. hrs.

Concert Band IV

Prerequisites: MSC1001, MSC1002, and MSC2003 with a minimum grade of C.
A continuation of MSC2003.

MSC2013 (1 - 1) 1 cr. hrs.

Jazz Ensemble III

MOTR PERF102B - 2020



Prerequisites: MSC1011 and MSC1012 with a minimum grade of C.
A continuation of MSC1012.

MSC2014 (1 - 1) 1 cr. hrs.

Jazz Ensemble IV

Prerequisites: MSC1011, MSC1012 and MSC2013 with a minimum grade of C.
A continuation of MSC2013.

MSC2023 (1 - 1) 1 cr. hrs.

Jazz Combo III

MOTR PERF102B - 2020



Prerequisites: MSC1021 and MSC1022 with a minimum grade of C.
A continuation of MSC1022.

MSC2024 (1 - 1) 1 cr. hrs.

Jazz Combo IV

Prerequisites: MSC1021, MSC1022 and MSC2023 with a minimum grade of C.
A continuation of MSC2023.

MSC2053 (1 - 2) 1 cr. hrs.

MAC Singers III

MOTR PERF 102C - 2022



Prerequisites: MSC1051 and MSC1052 with a minimum grade of C.
A continuation of MSC1051.

MSC2054 (1 - 2) 1 cr. hrs.

MAC Singers IV

Prerequisites: MSC1051, MSC1052, and MSC2053 with a minimum grade of C.
A continuation of MSC2053.

MSC2063 (1 - 2) 1 cr. hrs.

Chamber Singers III

Prerequisites: MSC1061 and MSC1062 with a minimum grade of C and AND concurrent enrollment in MSC1051 or MSC1052 or

MSC2053 or MSC2054.
A continuation of MSC1062.

MSC2064 (1 - 2) 1 cr. hrs.

Chamber Singers IV

Prerequisites: MSC1061, MSC1062, and MSC2063 with a minimum grade of C AND concurrent enrollment in MSC1051 or MSC1052 or MSC2053 or MSC2054..
A continuation of MSC2063.

MSC2073 (1 - 1) 1 cr. hrs.

Mineral Area Community Singers III

Prerequisites: MSC1071 and MSC1072 with a minimum grade of C.
A continuation of MSC1072.

MSC2074 (1 - 1) 1 cr. hrs.

Mineral Area Community Singers IV

Prerequisites: MSC1071, MSC1072, and MSC2073 with a minimum grade of C.
A continuation of MSC2073.

MSC2083 (1 - 1) 1 cr. hrs.

Guitar Ensemble III

Prerequisites: MSC1081 and MSC1082 with a minimum grade of C.
A continuation of MSC1082.

MSC2084 (1 - 1) 1 cr. hrs.

Guitar Ensemble IV

Prerequisites: MSC1081, MSC1082, and MSC2083 with a minimum grade of C.
A continuation of MSC2083.

MSC2095 (1 - 0) 1 cr. hrs.

Special Topics: Ensemble I

Prerequisite: MSC2004, MSC2014, MSC2024, MSC2034, MSC2044, MSC2054, MSC2064, MSC2074, or MSC2084 with a minimum grade of C, respectively, depending on which ensemble.
A continuation in one of the musical ensembles offered through the Mineral Area College music department.

MSC2096 (1 - 0) 1 cr. hrs.

Special Topics: Ensemble II

Prerequisite: MSC2095 with a minimum grade of C.
A continuation in one of the musical ensembles offered through the Mineral Area College music department.

MSC2103 (1 - 1) 1 cr. hrs.

Aural Skills III (Fall)

Prerequisite: MSC1102 with a minimum grade of C.
A continuation of Aural Skills levels I and II with an emphasis on extending studies into the areas

of chromaticism, syncopation, modulations and Medieval modes.

MSC2104 (1 - 1) 1 cr. hrs.

Aural Skills IV (Spring)

Prerequisite: MSC2103 with a minimum grade of C.
The fourth level of aural, vocal and cognitive skills in the singing of music at sight. This is a continuation of MSC 2103, with an emphasis placed upon extending studies into the areas of changing meters, hemiola, remote modulation and 20th century melodies.

MSC2203 (3 - 0) 3 cr. hrs.

Music Theory III (Fall)

Prerequisite: MSC1202 with a minimum grade of C.
Extension of materials of MSC1202 to include a more complex choral vocabulary, secondary dominants, altered chords, and the continuation and expansion of the modulatory processes.

MSC2204 (3 - 0) 3 cr. hrs.

Music Theory IV (Spring)

Prerequisite: MSC2203 with a minimum grade of C.
Extension of materials of MSC2203 to include the Neapolitan Sixth Chord, Ninth, Eleventh, and Thirteenth Chords and the Augmented Sixth Chords. Also includes an introduction to the music vocabulary of the 20th Century.

MSC2403 (1 - 0) 1 cr. hrs.

Applied Voice III

Prerequisites: MSC1401 and MSC1402 with a minimum grade of C.
A continuation of MSC1402.

MSC2404 (1 - 0) 1 cr. hrs.

Applied Voice IV

Prerequisites: MSC1401, MSC1402 and MSC2403 with a minimum grade of C.
A continuation of MSC2403.

MSC2413 (1 - 0) 1 cr. hrs.

Applied Piano III

Prerequisites: MSC1411 and MSC1412 with a minimum grade of C.
A continuation of MSC1412.

MSC2414 (1 - 0) 1 cr. hrs.

Applied Piano IV

Prerequisites: MSC1411, MSC1412, and MSC2413 with a minimum grade of C.
A continuation of MSC2413.

MSC2423 (1 - 0) 1 cr. hrs.

Applied Woodwinds III

Prerequisites: MSC1421 and MSC1422 with

a minimum grade of C.
A continuation of MSC1422.

MSC2424 (1 - 0) 1 cr. hrs.

Applied Woodwinds IV

Prerequisites: MSC1421, MSC1422, and MSC2423 with a minimum grade of C.
A continuation of MSC2423.

MSC2433 (1 - 0) 1 cr. hrs.

Applied Brass III

Prerequisites: MSC1431 and MSC1432 with a minimum grade of C.
A continuation of MSC1432.

MSC2434 (1 - 0) 1 cr. hrs.

Applied Brass IV

Prerequisites: MSC1431, MSC1432, and MSC2433 with a minimum grade of C.
A continuation of MSC2433.

MSC2443 (1 - 0) 1 cr. hrs.

Applied Percussion III

Prerequisites: MSC1441 and MSC1442 with a minimum grade of C.
A continuation of MSC1442.

MSC2444 (1 - 0) 1 cr. hrs.

Applied Percussion IV

Prerequisites: MSC1441, MSC1442, and MSC2443 with a minimum grade of C.
A continuation of MSC2443.

MSC2453 (1 - 0) 1 cr. hrs.

Applied Guitar III

Prerequisite: MSC1452 with a minimum grade of C.
A continuation of MSC1452.

MSC2454 (1 - 0) 1 cr. hrs.

Applied Guitar IV

Prerequisites: MSC1451, MSC1452, and MSC2453 with a minimum grade of C.
A continuation of MSC2453.

MSC2463 (1 - 0) 1 cr. hrs.

Applied Bass III

Prerequisites: MSC1461 and MSC1462 with a minimum grade of C.
A continuation of MSC1462.

MSC2464 (1 - 0) 1 cr. hrs.

Applied Bass IV

Prerequisites: MSC1461, MSC1462, and MSC2463 with a minimum grade of C.
A continuation of MSC2463.

MSC2473 (1 - 0) 1 cr. hrs.

Applied Composition III

Prerequisites: MSC1471 and MSC 1472 with a minimum grade of C.
A continuation of 1472.

MSC2474 (1 - 0) 1 cr. hrs.

Applied Composition IV

Prerequisites: MSC1471, MSC1472, and MSC2473 with a minimum grade of C.
A continuation of MSC2473.

MSC2483 (1 - 0) 1 cr. hrs.

Applied Jazz III

Prerequisites: MSC1481 and MSC1482 with a minimum grade of C.
A continuation of MSC1482.

MSC2484 (1 - 0) 1 cr. hrs.

Applied Jazz IV

Prerequisites: MSC1481, MSC1482, and MSC2483 with a minimum grade of C.
A continuation of MSC2483.

MSC2495 (1 - 0) 1 cr. hrs.

Special Topics: Applied Lesson I

Prerequisites: MSC2404, MSC2414, MSC2424, MSC2434, MSC2444, MSC2454, MSC2464, MSC2474, or MSC2484 with a minimum grade of C, respectively, depending on student's music area.
A weekly, private, one-on-one lesson with the instructor in the specified music area (i.e. voice, piano, brass, etc.).

MSC2496 (1 - 0) 1 cr. hrs.

Special Topics: Applied Lesson II

Prerequisite: MSC2495 with a minimum grade of C.
A weekly, private, one-on-one lesson with the instructor in the specified music area (i.e. voice, piano, brass, etc.).

PRACTICAL NURSING

NUR1001 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator.
Allows students who have experienced academic challenges and/or have withdrawn from a prior semester to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. Designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. The student is to attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams. The student does not attend clinical rotations. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course

evaluation will be pass/no pass, based on the nursing program grading scale.

NUR1002 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator.

Allows students who have experienced academic challenges and/or have withdrawn from a prior semester to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. Designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. The student is to attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams. The student does not attend clinical rotations. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course evaluation will be pass/fail, based on the nursing program grading scale.

NUR1003 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator.

Allows students who have experienced academic challenges and/or have withdrawn from a prior semester to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. Designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. The student is to attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams. The student does not attend clinical rotations. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course evaluation will be pass/fail, based on the nursing program grading scale.

NUR1004 (Arr - Arr) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator.

Allows students who have experienced academic challenges and/or have withdrawn from a prior semester to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. Designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. The student is to attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams. The student does not attend clinical rotations. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course evaluation will be pass/fail, based on the nursing program grading scale.

NUR1005 (0 - 0) 1 cr. hrs.

Nursing Reinforcement

Prerequisites: Acceptance into the nursing program for an attrition seat and approval of the Director of Allied Health and program coordinator.

Allows students who have experienced academic challenges and/or have withdrawn from a prior semester to review material and reinforce skills in nursing courses they have previously passed but cannot repeat. Designed to prepare students to re-enter the nursing program after there has been an unsuccessful semester. The student is to attend existing classes, take tests, and successfully complete lab practicum exams, check-offs, and dosage calculation exams. The student does not attend clinical rotations. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course evaluation will be pass/fail, based on the nursing program grading scale.

NUR1270 (2 - 2) 2 cr. hrs.

Body Function

Prerequisite: Acceptance into the Practical Nursing Program or Sequential Practical Nursing program courses, inclusive of 5 credit hours of anatomy, with a minimum grade of C. Provides students with fundamental knowledge of the functions of the major body systems. Relates how organized anatomical structures of a particular size, shape, form, or placement are intended to serve unique or specialized functions. With repeated emphasis of this principle, students are encouraged to integrate otherwise isolated factual information into a cohesive and understandable whole. Covers the essentials, places emphasis on concepts, and correlates body structure (anatomy) with function (physiology). Homeostasis is integrated by demonstrating how "normal" interactions of structures and their functions are achieved and maintained by dynamic counterbalancing forces.

NUR1290 (6 - 0) 6 cr. hrs.

Fundamentals of Nursing

Prerequisite: Acceptance into the current Practical Nursing program. Designed to provide basic knowledge and nursing skills upon which all future care is based. Communication in a nurse-client relationship, maintenance of a safe environment, body mechanics, assessment skills, utilization of observational and manipulative skills and equipment to perform physical examinations, documentation (including spelling, punctuation, and common medical abbreviations), legal and ethical implications, cultural considerations, formulation of a plan of care utilizing the nursing process, the infectious process cycle, preventing spread of communicable disease, sterile technique, personal hygiene, urine and bowel elimination, care of the inactive client, wound assessment and care, care of the surgical client, airway management, pain management, and care of the terminally ill are emphasized.

NUR1300 (3 - 0) 3 cr. hrs.

Therapeutic Nutrition

Prerequisite: Acceptance into the current Practical Nursing program. Designed to provide the student knowledge of the essential nutrients by definition, function, and food source; to relate how the body uses foods consumed for energy, growth, or maintenance; describe how health care providers can teach/assist clients to manipulate use of essential nutrients when pathology causes, or is caused by, nutritional impairment. Additional emphasis is placed on the need for health care providers to recognize changing nutritional needs of the various age-related populations throughout the lifespan and the need to educate clients about proper food preparation, storage, and safety. Cultural and religious diversity are included in terms of planning/providing meals/snacks that support physical, emotional, cultural, and spiritual needs and patient/family education. Legal and ethical decision-making issues are explored to emphasize the nurse's role as patient advocate regarding food choices and consumption based on their beliefs and to protect patient rights. Critical thinking through the nursing process provides the foundation for students to assume accountability for their own nursing practice. Discussion includes current trends and future issues in nutrition research.

NUR1310 (1 - 1) 1 cr. hrs.

Personal and Vocational Concepts

Prerequisite: Acceptance into the current Practical Nursing program. Designed to assist the student in relating the history of nursing to the concept of Practical Nursing vocational training, discussing health care systems, legal concerns, and ethical issues in the nursing profession while recognizing the impact of cultural diversity. Nursing theories in relation to the nursing process and nursing practice are explored. Emphasis is also placed on importance of memberships and participation in professional organizations and continued education, construction of a resume, job application, letter of resignation, and job interview skills.

NUR1320 (2 - 2) 2 cr. hrs.

Geriatric Nursing

Prerequisites: Successful completion of all program in Practical Nursing first trimester courses and sequential Practical Nursing program courses with a minimum grade of C. Designed to provide students with fundamental knowledge of functional changes in body systems commonly associated with aging, pathology, and/or inactivity. Human sexuality, living and care facilities, financial considerations, cultural implications, and pharmacotherapy are included to provide a holistic view of geriatric nursing care. Through theory and clinical experience, the students have the opportunity to assess and interact with an assigned client to reinforce physical assessment, documentation, and therapeutic communication skills. The geriatric clinical component includes a practice review of physical examination techniques on a co-student with the aid of body systems assessment handout. With a volunteer resident, students perform and document a functional assessment inclusive of data gathering to obtain a past and present health history, evaluate resident independence/dependence in performing ADLs, and document a process recording that includes

self-evaluation of therapeutic communication skills.

NUR1350 (4 - 2) 4 cr. hrs.

Maternity Nursing

Prerequisite: Successful completion of all program in Practical Nursing first trimester courses and sequential Practical Nursing program courses with a minimum grade of C. Through theory and clinical experience, this course is designed to provide information on the physiologic and psychologic changes and adaptation of the mother and family to pregnancy. Emphasis is also placed on high-risk categories, complications during labor and delivery, medical treatments, nursing interventions including client education, emotional and physical support, the normal newborn, and deviations from normal. Emphasis is placed on high-risk pregnancy categories, complications during labor and delivery, medical treatments, evidence-based nursing interventions, the normal newborn, and deviations from normal newborn. Cultural and religious diversity are included in terms of planning/providing physical, emotional, cultural and spiritual support and patient/family education. Legal and ethical decision-making issues are explored to emphasize the importance of the nurses' role as patient advocate.

NUR1370 (2 - 2) 2 cr. hrs.

Basic Pharmacology

Prerequisite: Acceptance into the current Practical Nursing program. Designed to provide the student knowledge of basic principles of pharmacology, the various medication administration routes, dosage calculations, application of the nursing process to medication administration, and utilization of information sources. Dosage calculation and lab practicum exams are included and are required to be successfully completed to progress in the program.

NUR1380 (12 - 0) 12 cr. hrs.

Medical-Surgical Nursing

Prerequisite: Successful completion of all program in Practical Nursing first and second trimester courses, and sequential Practical Nursing program courses, with a minimum grade of C. Designed to prepare students to respond to a wide array of demands and changes with the current shifting of nursing care from acute care hospital to community-based settings and the home. A continuing emphasis is placed on ethnic and cultural diversity, critical thinking through the nursing process, and client/family teaching about detection, prevention, and management of complications for clients being discharged within very few days of newly diagnosed major illnesses and surgeries. Concepts and challenges in client management, including concepts and general principles in perioperative, intraoperative, and postoperative client management, are stressed. Assessment, general management, and therapeutic interventions of specific pathophysiologic dysfunctions of major body systems as well as acute problems of infectious diseases are covered, and include exploration of legal and ethical decision-making issues to continue the emphasis of nurses as client advocates.

NUR1410 (1 - 1) 1 cr. hrs.

Applied Pharmacology

Prerequisite: Successful completion of all courses in the first and second trimester, and sequential Practical Nursing program courses, with a minimum grade of C. Intended to complete the pharmaceutical education started in first trimester Basic Pharmacology for beginning nurse generalists. Discussion includes the various drug classifications, profiles of drugs within each classification, their pharmacokinetics, physiological conditions for which they may be prescribed, their mechanisms of action, therapeutic effects, adverse/side effects, dosages, contraindications, toxicity/management of overdose, interactions, and the nursing process, including client teaching, for planning care for clients receiving agents within these classifications. These chapters are taught in tandem with the various medical-surgical topics included in Medical-Surgical nursing to enhance correlation of drug therapy with conditions of body systems. A clinical rotation for medication administration is included. As outlined in Basic Pharmacology: dosage calculations, preparation for drug administration, legal, ethical and cultural considerations, routes of medication administration, manipulative techniques for administering drugs, monitoring for therapeutic and side/adverse effects, and documentation are continued as points emphasized for successful completion of the clinical portion of this course.

NUR1420 (3 - 0) 3 cr. hrs.

Pediatric Nursing

Prerequisite: Successful completion of all program in Practical Nursing first trimester courses, NUR1350, and sequential Practical Nursing program courses, with a minimum grade of C. Designed to provide both classroom instruction and clinical experience to assist the student in identifying common disorders in children from infancy through adolescence and provide nursing care for hospitalized pediatric clients. Pathophysiology, pharmacotherapy, other medical treatment, psychosocial and cultural implications, and nursing care and teaching of the client and family are emphasized. Nursing measures to alleviate non-adaptive responses utilizing the nursing process, application of communication skills in the pediatric setting, and discussion of the special needs of hospitalized children and medication administration are included to provide a holistic approach to effective pediatric nursing care. Nursing measures to alleviate non-adaptive responses through utilization of the nursing process, application of therapeutic communication skills in the pediatric setting, legal and ethical issues, discussion of the special needs of hospitalized children, as well as adaptations for medication administration are included to provide a holistic approach to the delivery of effective pediatric nursing care across the wellness-illness.

NUR1430 (4 - 2) 4 cr. hrs.

Mental Health Nursing

Prerequisite: Successful completion of all program in Practical Nursing first trimester courses and sequential Practical Nursing program

courses with a minimum grade of C. Designed to introduce the student to history and trends in psychiatric nursing, major psychiatric theoretical models, the five axes of the psychiatric classification system, the major psychiatric illnesses inclusive of definitions, clinical manifestations, psychopharmacology, medical treatments, nursing interventions and milieu management. Intended to provide fundamental knowledge of mental health concepts and interactional techniques for the beginning nurse. The roles that emotions and stress play in the behavior of the client and client's family are emphasized to provide the student with a better understanding of behavior and provides a useful framework for planning and providing nursing care in any health care setting. Also serves as a comprehensive introduction to psychopathology and psychopharmacology. Synthesis of knowledge is gained through application of theory through a psychiatric clinical component during which students compose a comprehensive clinical assignment that serves to promote critical thinking and analysis skills.

**OFFICE SYSTEMS
TECHNOLOGY**

OST1400 (3 - 0) 3 cr. hrs.

Business Communication I

Designed to improve communication skills. Verbal, nonverbal and written communications are studied.

OST1500 (3 - 0) 3 cr. hrs.

Applied Accounting I

Introductory course designed to meet the needs of those students who will be pursuing the first course in accounting. Covers the accounting cycle for a sole proprietorship (service business), careers in accounting, accounting for cash, depreciation methods, and payroll.

OST1520 (3 - 0) 3 cr. hrs.

Applied Accounting II

Prerequisites: OST1500 with a minimum grade of C. Continuation of OST1500. Includes the following topics: accounting for sales and cash receipts, accounting for purchases and cash payments, accounting for merchandise inventory, the accounting cycle for merchandising business, accounting for bad debts, notes receivable and notes payable, long-term assets, and partnerships.

OST2200 (3 - 0) 3 cr. hrs.

Introduction to Business

A general survey course designed to give the student a general knowledge of the characteristics, functions and problems of the modern business world.

PARAMEDIC TECHNOLOGY

PAR1001 (Arr - Arr) 1 cr. hrs.

Paramedic Reinforcement

Designed to prepare students for reentering the Paramedic Technology program after withdrawal. Allows Paramedic Technology students who have withdrawn from the program in a previous semester the opportunity to review material and reinforce skills in courses they passed but cannot repeat. The course syllabus will be individualized for each student based on needs and instructor recommendation. The course evaluation will be pass/fail based on the program grading scale.

PAR2013 (5 - 1) 6 cr. hrs.

Principles Paramedic Technology I

Prerequisites: All of the following: (1) Acceptance into Paramedic program, and (2) MO EMT license, and (3) instructor consent, and (4) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (5) minimum Accuplacer Next Generation writing of 250, and (6) minimum Accuplacer Next Generation reading of 250. Corequisites: PAR2083 & PAR2213. Provides instruction in the following: foundations of professional paramedic practice, roles/responsibilities of the paramedic, the EMS agenda, workforce safety/wellness, research methods, scientific principles and paramedic science, ethics/legal issues, public health, illness/injury prevention, principles of pathophysiology and disease process, review of anatomy and physiology, medical terminology, advanced health assessment, therapeutic communication, history taking, physical exam techniques, communications, critical thinking, clinical decision making and teamwork, blood gas analysis, lab value interpretation and application, documentation, patients of diverse cultures, basic and advanced airway management, ventilatory management, resuscitation of the trauma patient, trauma care and trauma systems. This course consists of 2/3 lecture and 1/3 lab time.

PAR2023 (5 - 1) 6 cr. hrs.

Principles Paramedic Technology II

Prerequisites: All of the following: (1) Instructor consent, and (2) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (3) minimum Accuplacer Next Generation writing of 250, and (4) minimum Accuplacer Next Generation reading of 250, and (5) PAR2013, PAR2083, and PAR2213 with a minimum grade of C. Corequisites: PAR2123 & PAR2223. Continuation of the Principles of Paramedic Technology series. Integrates the theory behind the use of advanced diagnostic and treatment procedures in the management of chronic & acute illness and injuries. Content includes: pulmonology, immunology, GI/GU and nephrology, endocrine, allergies and anaphylaxis, pediatrics, toxicology, abuse and neglect. PALS and NRP certification courses will be completed. This course consists of 2/3 lecture and 1/3 lab time.

PAR2043 (4 - 1) 5 cr. hrs.

Principles Paramedic Technology III

Prerequisites: All of the following: (1) Instructor consent, and (2) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (3) minimum Accuplacer Next Generation writing of 250, and (4) minimum Accuplacer Next Generation reading of 250, and (5) PAR2023, PAR2123, and PAR2223 with a minimum grade of C. Corequisites: PAR2263. Continuation of the Principles of Paramedic Technology series. Integrates the theory behind the use of advanced diagnostic and treatment procedures in the management of chronic & acute illness and injuries. Content includes: Neurology, behavioral emergencies, infection control, communicable diseases, geriatrics, trauma. This course consists of 2/3 lecture and 1/3 lab time.

PAR2083 (5 - 1) 6 cr. hrs.

Paramedic Pharmacology

Prerequisites: All of the following: (1) Acceptance into Paramedic program, and (2) MO EMT license, and (3) instructor consent, and (4) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (5) minimum Accuplacer Next Generation writing of 250, and (6) minimum Accuplacer Next Generation reading of 250. Corequisites: PAR2013 & PAR2213. Provides instruction and application of the following: Historical development of pharmacology, sources of drugs, drug terminology and classification, complementary and alternative medicine, sources of drug information, pharmacokinetics and pharmacodynamics, medication administration, medication forms, medication routes, drug measurement and dosing, elements of a drug order, considerations of administration of medications, peripheral intravenous access, phlebotomy, central venous access, blood products and transfusions, emphasis is placed on assimilation of content knowledge regarding all drug classes, common prescribed medications, and common emergency and critical care medications. Students will be expected to demonstrate application knowledge at the level of unconscious competency of the required formulary. Course consists of 2/3 lecture and 1/3 lab time.

PAR2100 (4 - 0) 4 cr. hrs.

Paramedic Anatomy & Physiology

Prerequisites: Must be provisionally accepted into the AAS Paramedic Technology or Certificate Paramedic Technology program. Designed specifically for the paramedic student to provide a basic understanding of the structure and function of the human body as related to paramedic science and clinical practice. Content includes an overview of each body system. The pathophysiology of common diseases and traumatic injury will be emphasized as a major objective of the program. Learning and evaluation of anatomy will be facilitated using anatomy models and diagrams. Learning of physiology and pathophysiology will be facilitated using clinical simulation, scenarios, and group exercises to ensure authentic connection with current clinical practice.

PAR2123 (5 - 1) 6 cr. hrs.

Paramedic Cardiology

Prerequisites: All of the following: (1) Instructor consent, and (2) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (3) minimum Accuplacer Next Generation writing of 250, and (4) minimum Accuplacer Next Generation reading of 250, and (5) PAR2013, PAR2083, and PAR2213 with a minimum grade of C. Corequisites: PAR2023 & PAR2223. Provides education in the following areas: cardiovascular pharmacology, applied cardiac anatomy and physiology, cardiac pathophysiology, principles of electrocardiography, ECG monitoring, systematic approach to ECG rhythm interpretation, pre-hospital ECG devices and equipment, at-home ECG monitoring, automated external defibrillators (AED), diagnostic 12-lead ECG interpretation and application, 15-lead ECG interpretation and application, right sided ECG interpretation and application, posterior ECG interpretation and application, evaluating quality of CPR, management of typical and atypical ACS presentations, electrocardiographic assessment of left ventricular function, defibrillation and cardioversion. ACLS certification is completed in this course. This course consists of 2/3 lecture and 1/3 lab time.

PAR2213 (Arr - Arr) 3 cr. hrs.

Paramedic Clinical I

Prerequisites: All of the following: (1) Acceptance into Paramedic program, and (2) MO EMT license, and (3) instructor consent, and (4) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (5) minimum Accuplacer Next Generation writing of 250, and (6) minimum Accuplacer Next Generation reading of 250. Corequisites: PAR2013 & PAR2083. Provides practical application regarding assessment, diagnosis and management of introductory acute illness and trauma injuries, while synergistically developing critical thinking/problem-solving skills and application of emergency care theory. A significant component of this course will include orientation, introduction, and utilization of patient simulation. Facilitates application of advanced care in the hospital clinical setting under the supervision of licensed preceptors. It is the responsibility of the student to seek opportunities to apply assessment, physical exam techniques, invasive procedures, and treatments learned and verified in the classroom and laboratory setting. Assigned objectives must be completed by the student as outlined in the course syllabus. Students are responsible for documenting completion of all course objectives and presenting evidence of critical thinking and clinical decision making based on their experience with emergency department and hospitalized patients. Clinical objectives meet or exceed current National Association of EMS Educators (NAEMSE) EMS Education Standards and NREMT requirements.

PAR2223 (Arr - Arr) 4 cr. hrs.

Paramedic Clinic II

Prerequisites: All of the following: (1) Instructor consent, and (2) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra

& Statistics of 250, and (3) minimum Accuplacer Next Generation writing of 250, and (4) minimum Accuplacer Next Generation reading of 250, and (5) PAR2013, PAR2083, and PAR2213 with a minimum grade of C.

Corequisites: PAR2023 & PAR2123.

Facilitates application of advanced care in the hospital and field clinical setting under the supervision of licensed preceptors. Application includes: assessment, physical exam techniques, invasive procedures, and treatments learned and verified in the classroom and laboratory setting. Clinical objectives meet or exceed current NAEMSE EMS Educational Standards and NREMT requirements. Required training for clinical includes: HIPAA training, blood-borne pathogen training, sexual harassment training, hand hygiene training, patient safety training, blood specimen collection training, preventing catheter related infections training, IV-site dressing training, medication safe practice training, academic integrity training, JCAHO-Transforming Healthcare Education and Reducing Medical Errors Education.

PAR2263 (Arr - Arr) 3 cr. hrs.

Paramedic Clinical III

Prerequisites: All of the following: (1) Instructor consent, and (2) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (3) minimum Accuplacer Next Generation writing of 250, and (4) minimum Accuplacer Next Generation reading of 250, and (5) PAR2023, PAR2123, and PAR2223. Corequisites: PAR2043.

Facilitates application of advanced care in the hospital and field clinical setting under the supervision of licensed preceptors. This is the final clinical course prior to the field internship phase. The student should be working on transition to the team leader role. Application includes: assessment, physical exam techniques, invasive procedures, and treatments learned and verified in the classroom and laboratory setting. Clinical objectives meet or exceed current NAEMSE EMS Educational Standards and NREMT requirements. Required training for clinical includes: HIPAA training, blood-borne pathogen training, sexual harassment training, hand hygiene training, patient safety training, blood specimen collection training, preventing catheter related infections training, IV-site dressing training, medication safe practice training, academic integrity training, JCAHO-Transforming Healthcare Education and Reducing Medical Errors Education.

PAR2353 (1 - 0) 1 cr. hrs.

Paramedic Internship Seminar

Prerequisites: All of the following: (1) Instructor consent, and (2) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (3) minimum Accuplacer Next Generation writing of 250, and (4) minimum Accuplacer Next Generation reading of 250, and (5) PAR2043, and PAR2263 with a minimum grade of C. Corequisites: PAR2373. Classroom aspect of the field internship capstone for paramedic students. Requires each student check in and verify appropriate progress in the field internship capstone. After completion of the field internship capstone, this course will transition to preparing the student for the NREMT-P examination process (practical and written).

PAR2373 (Arr - Arr) 4 cr. hrs.

Paramedic Field Internship Capstone

Prerequisites: All of the following: (1) Instructor consent, and (2) minimum Accuplacer Next Generation Quantitative Reasoning, Algebra & Statistics of 250, and (3) minimum Accuplacer Next Generation writing of 250, and (4) minimum Accuplacer Next Generation reading of 250, and (5) PAR2043, and PAR2263 with a minimum grade of C. Corequisites: PAR2353. Facilitates application and evaluation of advanced care in the pre-hospital field setting under the supervision of licensed Paramedic preceptors. Represents the final summative evaluation of student clinical (pre-hospital) performance as team leader. It is the responsibility of the student to seek opportunities to act as team leader and apply assessment, physical exam techniques, invasive procedures, treatments, and effective team communication and dynamics developed in previous field experience. Assigned objectives must be completed by the student as outlined in the course syllabus. Students are responsible for documenting completion of all course objectives and presenting evidence of critical thinking and clinical decision-making based on their experience with patients in the pre-hospital setting. Field internship capstone objectives meet or exceeded current National Association of EMS Educators (NAEMSE) EMS Education Standards and NREMT requirements.

PAR2500 (Arr - Arr) 6 cr. hrs.

Paramedic Science Update

Prerequisites: Instructor consent and must have declared a major of Paramedic Technology. Current Missouri Paramedic or NREMT Paramedic license from a State accredited institution. Current certification in BLS HCPs, ACLS, PALS, and ITLS or PHTLS. A hybrid course consisting of online didactic work with an arranged practicum. Provides content update for students who have received their Paramedic Program completion from other institutions and wish to obtain their Associate of Applied Science in Paramedic Technology at MAC. Allows licensed paramedics that graduated from other institutions to complete the contact hour and curriculum transfer requirements for the AAS in Paramedic Technology. Updates include: research methods; health care issues; current clinical science; waveform Capnography; pre-hospital critical thinking; and science update of all content areas described in NAEMSE EMS Education Standards.

PAR2510 (Arr - Arr) 3 cr. hrs.

Paramedic Refresher

Prerequisites: Instructor consent. Current Missouri Paramedic or NREMT Paramedic license from a State-accredited institution or have completed a paramedic program from a State accredited institution. Current certification in BLS HCPs, ACLS, PALS, and ITLS or PHTLS. Must have basic computer and internet skills. CIS1050 or CIS1750 recommended. A hybrid course consisting of online didactic work with an arranged practicum. A content, curriculum and competency update course for students who have received their paramedic license and will provide 100 core continuing education units required for licensure renewal. Course may also provide remediation for the paramedic student who has been unsuccessful in passing the National Registry practical or written examination. Course exceeds paramedic-level NAEMSE and

BEMS re-licensure requirements.

PAR2600 (4 - 2) 6 cr. hrs.

Community Paramedic

Prerequisite: Missouri Paramedic License and Health Sciences Division approval. Discusses the Community Paramedic's (CP) specific roles and responsibilities as a part of the healthcare team. Interdisciplinary work will be explored and defined as it relates to patient focused care and the CP. Explores social, cultural, ecological, political and economic factors as they impact patients and communities. Students will research the latest standards and guidelines in the care and management of the patient with chronic diseases. Provides practical application regarding the comprehensive patient history and physical exam, diagnostic testing and imaging, diagnosis and management of patients with chronic diseases. Students will demonstrate competency in the practice of community paramedicine under the direct supervision of clinical preceptors. This course meets regulations set by the MO-DHSS Bureau of EMS and CoAEMSP accreditation standards.

PERSONAL AWARENESS

PAW1060 (1 - 0) 1 cr. hrs.

Preparation for Employment

Designed to teach students skills essential to the development of a sound job seeking strategy. Requires students to prepare a resume, cover letter, follow-up letter, and application blank, as well as practice interviewing techniques and learn tips to improve their chances of being successfully employed.

PHYSICAL EDUCATION

PED1050 (2 - 0) 2 cr. hrs.

Officiating of Sport Activities (Fall, Spring)

Physical education lecture. Does not satisfy the physical education activity requirement. A study of the mechanical and technical knowledge of rules, techniques, methods, and relation of the official to the sports of basketball, baseball, or volleyball.

PED1070 (2 - 0) 2 cr. hrs.

Fundamentals of Basketball (Spring)

Physical education lecture. Does not satisfy the physical education activity requirement. History of basic fundamentals, rules, and methods of developing material for this sport. Designed for students majoring or minoring in physical education.

PED1130 (3 - 0) 3 cr. hrs.

Intro to Sports Management

Introduction to the Sport Management profession and it's large array of career opportunities, organizational structures, current issues/trends, and interactions with other industries. The sports industry represents the 11th largest industry in the US and is growing every year.

PED1270 (3 - 0) 3 cr. hrs.

Care/Prevention Athletic Injuries

Physical education lecture. Does not satisfy the physical education activity requirement. Introduces students to the basic medical concepts and related scientific information to provide groundwork in the prevention, recognition, assessment, management, and rehabilitation of sports-related injuries and illness.

PED1310 (0 - 1) 1 cr. hrs.

Esports I

Prerequisite: Instructor consent.
Physical Education course where student-athletes participate in esports practices and games. They will complete against other schools.

PED1380 (1 - 1) 1 cr. hrs.

Beginning Archery

Students will learn the fundamentals of archery including technique, form, accuracy, and safety.

PED2000 (1 - 1) 1 cr. hrs.

Basic Physical Fitness

Designed to meet the needs of the student for recreational activity and body conditioning.

PED2310 (0 - 2) 1 cr. hrs.

Esports II

Prerequisite: PED1310 with a minimum grade of C and instructor consent.
Physical Education course where student-athletes participate in esports practices and games. They will complete against other schools.

PED2350 (Arr - Arr) 1 cr. hrs.

Varsity Sports-Women's Softball

Prerequisite: Instructor consent.
Participate in the woman's varsity softball program.

PED2520 (0 - 2) 1 cr. hrs.

Varsity Cheerleading I

Prerequisite: Instructor consent.
Restricted to students who are on the cheerleading squad. Tryouts for the squad are held each year. Cheerleaders are required to attend daily practices and perform at most men's home basketball games. The cheerleading squad will also perform at several men's and women's basketball games on the road. One unit of physical education credit is granted if the student completes one full year (two semesters) on the squad.

PED2530 (0 - 2) 1 cr. hrs.

Varsity Cheerleading II

Prerequisite: PED2520 with a minimum grade of C.
One unit of physical education credit is granted if the student completes a second full year (two

semesters) on the cheerleading squad.

PED2540 (Arr - Arr) 1 cr. hrs.

Varsity Sports-Men's Golf

Prerequisite: Instructor consent.
Participation in the men's varsity golf program.

PED2550 (1 - 1) 1 cr. hrs.

Varsity Sports-Men's Basketball

Prerequisite: Instructor consent.
Participation in the men's varsity basketball program.

PED2560 (Arr - Arr) 1 cr. hrs.

Varsity Sports-Women's Basketball

Prerequisite: Instructor consent.
Participation in the women's varsity basketball program.

PED2570 (Arr - Arr) 1 cr. hrs.

Varsity Sports-Women's Volleyball

Prerequisite: Instructor consent.
Participation in the women's varsity volleyball program.

PED2580 (Arr - Arr) 1 cr. hrs.

Varsity Sports-Men's Baseball

Prerequisite: Instructor consent.
Participation in the men's varsity baseball program.

PED2581 (Arr - Arr) 1 cr. hrs.

Varsity Sports-Men's Cross Country

Prerequisite: Instructor consent.
Participation in the men's cross country program.

PED2582 (Arr - Arr) 1 cr. hrs.

Varsity Sports-Women Cross Country

Prerequisite: Instructor consent.
Participation in the women's cross country program.

PED2583 (Arr - Arr) 1 cr. hrs.

Var Sport-Men Outdoor Track & Field

Prerequisite: Instructor consent.
A 1-hour Physical Education credit where student-athletes participate in short and intermediate running for time. They can also participate in field events such as discus/javelin/shot-put etc. They will compete against other schools.

PED2584 (Arr - Arr) 1 cr. hrs.

Var Spt-Women Outdoor Track & Field

Prerequisite: Instructor consent.
A 1-hour Physical Education credit where student-athletes participate in short and

intermediate running for time. They can also participate in field events such as discus/javelin/shot-put etc. They will compete against other schools.

PED2585 (Arr - Arr) 1 cr. hrs.

Var Sports-Men's Indoor Track/Field

Prerequisite: Instructor consent.
A 1-hour Physical Education credit where student-athletes participate in short and intermediate running for time. They can also participate in field events such as discus/javelin/shot-put etc. They will compete against other schools.

PED2586 (Arr - Arr) 1 cr. hrs.

Var Sports-Women's Indoor Track/Fld

Prerequisite: Instructor consent.
A 1-hour Physical Education credit where student-athletes participate in short and intermediate running for time. They can also participate in field events such as discus/javelin/shot-put etc. They will compete against other schools.

PED2587 (Arr - Arr) 1 cr. hrs.

Varsity Sports - Men's Soccer

Prerequisite: Instructor consent.
A 1-hour Physical Education credit where student-athletes participate in soccer practices and games. They will compete against other schools.

PED2588 (Arr - Arr) 1 cr. hrs.

Varsity Sports - Women's Soccer

Prerequisite: Instructor consent.
A 1-hour Physical Education credit where student-athletes participate in soccer practices and games. They will compete against other schools.

PED2591 (0 - 0) 1 cr. hrs.

Women's Half Marathon

Prerequisite: Instructor consent.
Students will participate in Half Marathon's (13.1 miles and 21.1 kilometers) during the fall semester.

PED2592 (0 - 0) 1 cr. hrs.

Men's Half Marathon

Prerequisite: Instructor consent.
Students will participate in Half Marathon's (13.1 miles and 21.1 kilometers) during the fall semester.

PED2700 (Arr - Arr) 1 cr. hrs.

Wellness Center I

Must meet with instructor during the first week of classes. Instruction in the development of fitness planning, fitness goal setting, and personal health and wellness. An introductory

course where students will gain the knowledge of a wide variety of fitness equipment. Students will participate in activities designed to increase strength, flexibility, and cardiovascular endurance.

PED2710 (Arr - Arr) 1 cr. hrs.

Wellness Center II

Prerequisite: PED2700 with a minimum grade of C.
Must meet with instructor during the first week of classes. Instruction in the development of fitness planning, fitness goal setting, nutrition, and personal health and wellness. Students will participate in activities designed to increase strength, flexibility, and cardiovascular endurance. Students are encouraged to do pre- and post-testing to track their fitness gains.

PED2720 (Arr - Arr) 1 cr. hrs.

Total Fitness

Prerequisites: PED2700 and PED2710 with a minimum grade of C.
Must meet with instructor during the first week of classes. Instruction in the development of fitness planning, fitness goal setting, nutrition, and personal health and wellness. Students will participate in activities designed to increase strength, flexibility, and cardiovascular endurance. Students are encouraged to do pre- and post-testing to track their fitness gains.

PED2730 (Arr - Arr) 1 cr. hrs.

Cycling for Fitness

Prerequisite: PED2700, PED2710, and PED2720 with a minimum grade of C.
Must meet with instructor during the first week of classes. The development of fitness planning, fitness goal setting, nutrition, and personal health and wellness. Activities designed to increase strength, flexibility, and cardiovascular endurance. Students are encouraged to do pre- and post-testing to track their fitness gains. Designed with the cyclist/spinner in mind, but allows for body fitness by using various training methods.

PED2780 (Arr - Arr) 2 cr. hrs.

Fit for Life

MOTR IDSE102 - 2024



Prerequisite: Enrollment in PED2950 and PED2780 is prohibited.
An online class where students can earn activity credit by recording workouts through a program called 'mapmyrun.' Students will participate in a cardiovascular exercise for 30 minutes or more that will be logged, recorded and sent to instructor's email for credit. Mapmyrun has the capability to determine distance, time and location. In order to meet class requirements, students will be required to show improvement in their cardiovascular endurance over the course of the 16 weeks. Class includes weekly discussion board posts, journal articles, essays, and a comprehensive final.

PED2790 (Arr - Arr) 2 cr. hrs.

Wellness

Wellness introduces the student to the relationship between physical fitness and a healthy lifestyle. Different aspects of fitness, principles of personal training, individual pre/post assessments and prescription exercise programs are examined. Circuit training, Cardio only, Body Weight, H.I.I.T. and other workout styles are examined and experienced to not only expose the student to these options but help find out what works best for the individual. Group fitness classes will be scheduled in the Wellness Center.

PED2820 (3 - 0) 3 cr. hrs.

Sport and Society

Physical education lecture. Does not satisfy the physical education activity requirement. The study of inter-relationships between society, culture, values and sport and the ways in which they influence one another.

PED2840 (3 - 0) 3 cr. hrs.

Psych of Coaching/Human Performance

Physical education lecture. Does not satisfy the physical education activity requirement. Development of a coaching philosophy, instructional techniques, and strategies for dealing with teaching, practice, and game situations.

PED2860 (2 - 0) 2 cr. hrs.

Foundations of Physical Education

Prerequisite: ENG1330, EDU2040, and PSY1130 with a minimum grade of C and one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 3.5 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Physical education lecture. Does not satisfy the physical education activity requirement. Designed for students majoring in physical education. Students will be exposed to the scientific foundations of physical education and sports. Will provide students with the knowledge of historical and philosophical events and values of the field. Based upon the recommendations from the Missouri Directory of Physical Education and Certification Standards. A variety of teaching methods will be used to reach different cultures and learning styles.

PED2880 (3 - 0) 3 cr. hrs.

Nutrition and Athletic Performance

Physical education lecture. Does not satisfy the physical education activity requirement. For non-nursing students. Fundamental principles of human nutrition and their applications essential to health from a physiological point of view. Focuses on nutrient requirements, food sources, and adequate diet selection in regards to the affects and benefits to athletic performance.

PED2950 (1 - 1) 2 cr. hrs.

Wellness for the Individual

MOTR IDSE102 - 2024



Prerequisite: Enrollment in PED2950 and PED2780 is prohibited.
Allows students to learn how to ensure they are working towards a healthy approach to life both physically and mentally. This survey course will examine the anatomy and body systems required for physical wellness, along with dietary choice and behaviors. Coping strategies will be explored to prepare students to remain healthy despite challenges in their lives.

PHILOSOPHY

PHI1300 (0 - 0) 3 cr. hrs.

Biomedical Ethics

MOTR PHIL102P - 2024



Prerequisite: Must have met one of the following: (1) minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation Reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average, (3) or a minimum grade of C in RDG 0900, ENG 0990, or ENG 0090, or (4) have earned 24 college-level semester credit hours.
Introduces students to moral theories and principles through the study of medical and bioethical issues. Students will investigate and analyze historical and current cases in bioethics. Topics will include the ethics of healthcare, patient consent, euthanasia, abortion, biomedical and stem cell research, addiction, infectious disease, weight management, and ethical dilemmas.

PHI1400 (3 - 0) 3 cr. hrs.

Introduction to Philosophy

MOTR PHIL100



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Study the great philosophers and their thoughts on the meaning of life, limits of knowledge and basis for individual liberty.

PHI1410 (3 - 0) 3 cr. hrs.

Comparative Religion

MOTR RELG100



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Explore the major world religions, including Hinduism, Buddhism, Judaism, Christianity and Islam.

PHI1420 (3 - 0) 3 cr. hrs.

Introduction to Ethics

MOTR PHIL102



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Gain an understanding of the ethical theory with emphasis on comparison of contemporary American ethics with that of classical and modern moral principles.

PHYSICAL SCIENCE

PHS1040 (3 - 0) 3 cr. hrs.

Consumer Chemistry

MOTR CHEM100 - 2020



Prerequisite: MAT0930, MAT0935 or higher-level math course with a minimum grade of C, or a minimum ACT math score of 15, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 226, or Accuplacer Advanced Algebra and Functions score of 224. Exploratory chemistry course for non-science majors that introduces the basic principles of chemistry with an emphasis on chemistry in society, the environment, and the human body.

PHS1200 (3 - 0) 3 cr. hrs.

Introduction to Astronomy

MOTR ASTR100



Introduction to astronomical objects, structures, and processes

designed for non-science majors. Topics include the history and cultural impact of astronomy, planetary and stellar evolution, galaxies, black holes and other exotic objects, the birth and large-scale structure of the cosmos, and life in the universe.

PHS1250 (3 - 4) 5 cr. hrs.

Introductory Chemistry

MOTR CHEM100L



Prerequisite: MAT0930, MAT0935 or higher-level math course with a minimum grade of C, or a minimum ACT math score of 15, or Accuplacer Quantitative Reasoning, Algebra and Statistics score of 226, or Accuplacer Advanced Algebra and Functions score of 224. Survey of the fundamentals of chemistry. Three hours of lecture and four hours of lab per week.

PHS1350 (4 - 3) 5 cr. hrs.

General Chemistry I

MOTR CHEM150L



Prerequisites: One unit of high school chemistry and one of the following: (1) MAT1270 or higher with a minimum grade of C or (2) concurrent enrollment in MAT1270. High school physics is recommended. Explore a deeper understanding of the fundamentals of chemistry including atomic theory and stoichiometry. The first half of a two-semester course. Three hours of lecture, one hour of problem session, and three hours of lab per week.

PHS1390 (3 - 3) 4 cr. hrs.

General Chemistry II (Spring)

Prerequisite: PHS1350 or equivalent with a minimum grade of C. A continuation of PHS1350. Explore more advanced subject matter with the emphasis placed on kinetics, equilibrium, and chemical thermodynamics. Three hours of lecture and three hours of lab per week.

PHS1400 (4 - 2) 5 cr. hrs.

Earth Science

MOTR PHYS110LES



Prerequisite: MAT0900, MAT0920, or modules MAT0020, MAT0030 and MAT0040, or higher-level math course with a minimum grade of C, or ACT math score of 15-18, or Accuplacer Next Generation Quantitative Reasoning, Algebra and Statistics of 237-249 or Accuplacer Next Generation Advanced Algebra and Functions of 200-236. An introduction to the earth sciences emphasizing the structure, materials, and history of the earth, its place in the solar system, and the processes that occur in shaping the earth. Four one-hour lectures and one two-hour laboratory per week. Includes lab.

PHS1420 (3 - 2) 4 cr. hrs.

College Physics I (Fall)

MOTR PHYS150L



Prerequisite: MAT1230 or MAT1270 or higher with a minimum grade of C. An introduction to the nature of physical thinking and selected topics in mechanics, statics, dynamics, heat and thermodynamics, oscillatory motion and sound. Three lectures and one two-hour lab per week. Includes lab.

PHS1440 (3 - 2) 4 cr. hrs.

College Physics II (Spring)

Prerequisite: PHS1420 with a minimum grade of C. A continuation of PHS1420, with emphasis on electricity, magnetism, optics and modern physics. Includes lab.

PHS2420 (3 - 0) 3 cr. hrs.

Earth Science I

MOTR GEOL100



Prerequisite: MAT0900, MAT0920, MAT0935 or modules MAT0020, MAT0030 and MAT0040, or higher-level math course with a minimum grade of C, or ACT math score of 15-18, or Accuplacer Next Generation Quantitative Reasoning, Algebra and Statistics of 237-249 or Accuplacer Next Generation Advanced Algebra and Functions of 200-236. An introduction to the earth sciences emphasizing structure, materials, history of the earth, and the processes that occur in shaping the earth and oceanography.

PHYSIOLOGY & HEALTH

PHY1120 (2 - 0) 2 cr. hrs.

School Health

Deals with the structure and functions of the human body and the principles of its care. Emphasis is placed on nutrition, chronic and contagious diseases, and reproduction. Designed to give students a practical knowledge of personal health care. Will benefit students pursuing child-centered careers as children's and adults' health will be a primary focus of the course.

POLITICAL SCIENCE

POS1180 (3 - 0) 3 cr. hrs.

American Political Systems

MOTR POSC101



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT

reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Study local, state, and national government systems.

PSYCHOLOGY

PSY1040 (1 - 0) 1 cr. hrs.

Mental Health First Aid

Learn how to administer "first aid" to individuals experiencing a mental health crisis situation and/or who are in the early stages of a mental health disorder.

PSY1130 (3 - 0) 3 cr. hrs.

General Psychology I

MOTR PSYC100



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Gain a broad overview of the general field of psychology and fundamental principles of human behavior. Includes the biology of behavior, learning and memory, emotion and motivation, growth and development, individual personality, psychopathology, and treatment of mental illness.

PSY1140 (3 - 0) 3 cr. hrs.

General Psychology II

Prerequisites: PSY1130 with a minimum grade of C and one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Experience a more intensive examination of the principles and theories of human behavior studied in General Psychology I. Covers a broad spectrum of interest areas in psychology to help the student bridge the gap between principles, theories and the real world. Emphasis is placed on developing advanced knowledge and skills of scientific analysis, library research and clarity of scientific writing.

PSY1160 (3 - 0) 3 cr. hrs.

Applied Psychology

Prerequisite: PSY1130 with a minimum grade of C.
Application of psychological principles and theory to modern-day settings and everyday life with emphasis on personal adjustment, stress and health, development, social influences, interpersonal communication, intimate relationships, careers and work.

PSY1250 (3 - 0) 3 cr. hrs.

Human Growth & Development

MOTR PSYC200



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Provides a lifespan approach to development. Examines major psychological issues, theories, and research concerning infancy, childhood, adolescence, and adulthood. Influences on physical, cognitive, personality, and social development are analyzed.

PSY2000 (3 - 0) 3 cr. hrs.

Abnormal Psychology

Prerequisites: PSY1130 with a minimum grade of C and one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours.
Survey various psychological disorders, including their signs, symptoms, causes, and treatment, as well as the theoretical perspectives through which these disorders are viewed. Legal and ethical issues are also discussed along with other controversial topics in the field.

PHYSICAL THERAPY ASSISTANT

PTA1000 (5 - 0) 5 cr. hrs.

Anatomy & Physiology for PTA

Prerequisite: Acceptance into PTA program.
Examine the structural, histological and chemical composition of the systems of the human body, with particular emphasis on systems as they are encountered by a physical therapy assistant.

PTA1002 (2 - 2) 2 cr. hrs.

Intro to Physical Therapy Assisting

Prerequisite: Acceptance into PTA program.
Introduces the student to the roles of the PTA, PT, and other health care professionals. Focuses on the study of professional behaviors supported by documents from the APTA, upholding ethical practices, abiding by applicable laws, and maintaining patient confidentiality. Other topics include communication strategies, patient diversity, and issue related to disability services. Students are introduced to SOAP note documentation.

PTA1040 (3 - 0) 3 cr. hrs.

Human Development

Prerequisite: Acceptance into PTA program.
Explore the cognitive, emotional, physical, and social factors that affect human growth and development across the lifespan. Emphasis is on theories, current research and practical applications. Lecture, reflective writing, and observations are utilized to enhance learning.

PTA1062 (3 - 0) 3 cr. hrs.

Basic Patient Care w/Lab

Prerequisite: Acceptance into PTA program.
Learn fundamental skills such as body mechanics, infection control, vital signs, transfers, assistive devices and application of bandages. Students apply wheelchair knowledge to real-life situations and simulated patient scenarios. Students also become certified in CPR.

PTA1080 (3 - 0) 3 cr. hrs.

Physical Agents & Modalities w/Lab

Prerequisite: Acceptance into the PTA program.

Presents the theory and practical application of modalities commonly used in physical therapy practice. Basic scientific and physiologic principles, indications, contraindications, and how each modality works are explored.

PTA1100 (1 - 1) 1 cr. hrs.

Clinical Practice I

Prerequisite: Acceptance into the PTA program.

First in a series of four focused clinical experiences in an approved clinical site, this part-time clinical provides the student with a first opportunity for hands-on patient care. Emphasis is on connecting theoretical knowledge to direct patient care. Work under the direct supervision of a licensed physical therapy professional.

PTA2210 (3 - 0) 3 cr. hrs.

Health and Disease

Prerequisite: Acceptance into the PTA program.

Explore various disease pathologies and their implications for physical therapy. Learn about diseases of the musculoskeletal and nervous system as well as the effects of immobility. Chronic diseases, infectious processes, genetic

conditions, immune responses and oncology will also be discussed with an emphasis on respiratory and cardiovascular conditions.

PTA2220 (4 - 2) 4 cr. hrs.

Funct Anatomy & Kinesiology w/Lab

Prerequisite: Acceptance into the PTA program.

An in-depth study of the science behind movement of the human body joint by joint. Arthrokinematics, osteokinematics, muscle interactions and joint mobilizations are included in this lab course.

PTA2224 (2 - 2) 2 cr. hrs.

Tests and Measures

Prerequisite: Acceptance into the PTA program.

Focus on application techniques of tests and measures commonly utilized in physical therapy practice. Techniques include palpation of bony landmarks and soft tissue structures, special tests for common musculoskeletal conditions, and goniometry measurement techniques for the head, neck, trunk, and extremities. Manual muscle testing procedures for major muscle groups are also a major component of this course.

PTA2242 (4 - 2) 5 cr. hrs.

Therapeutic Exercise I w/Lab

Prerequisite: Acceptance into the PTA program.

Study various common orthopedic and neurological diagnoses encountered along with various interventions. Principles of stretching, strengthening and endurance are examined. Interventions include peripheral joint mobilization, therapeutic exercise, interventions and progression within the plan of care along with documentation.

PTA2260 (2 - 2) 2 cr. hrs.

Trends & Issues in Physical Therapy

Prerequisite: Acceptance into PTA program.

Explore current topics in the field of physical therapy. Evidence-based practice, disablement models, the core values of the APTA, effective patient education, effective oral and written communication with other health care professionals, as well as working as part of a multidisciplinary team are discussed. Guest speakers, reflective writing, and community outreach facilitate learning.

PTA2282 (Arr - Arr) 3 cr. hrs.

Clinical Practice II

Prerequisites: Acceptance into PTA program and PTA1100 with a minimum grade of C. Second in a series of four focused clinical experiences in an approved clinical site, this full-time (160 hours over four weeks) clinical provides the student with the opportunity to further apply technical skills in the clinical setting. Emphasis is on appropriate professional behaviors, working as a member of a health care team, and continuing to connect theoretical

knowledge to direct patient care. Work under the direct supervision of a licensed physical therapy professional.

PTA2302 (4 - 2) 4 cr. hrs.

Therapeutic Exercise II

Prerequisite: Acceptance into the PTA program and PTA 2242 with a minimum grade of C.

Explore some specialized areas of physical therapy including cardiac rehab, chest PT, pediatrics, aquatic therapy, women's health, lymphedema therapy, and the essentials of prosthetics and orthotics. Learning is enhanced by field trips, observation, case studies, and guest speakers.

PTA2340 (2 - 2) 2 cr. hrs.

Special Problems in PTA

Prerequisite: Acceptance into PTA program.

Examine the critical decision-making process including scope of practice, adverse reactions, complications and progression within the plan of care. Work through case scenarios from pediatrics to geriatrics with various orthopedic and neurological disorders.

PTA2362 (Arr - Arr) 4 cr. hrs.

Clinical Practice III

Prerequisite: Acceptance into PTA Program and PTA2282 with a minimum grade of C. Third in a series of four focused clinical experiences in an approved clinical site, this six-week, full-time (40 hours/week) clinical provides the student with one of two culminating opportunities to apply technical skills in a clinical setting before entering the workforce. Emphasis is on appropriate professional behaviors, working as a member of a health care team, and continuing to connect theoretical knowledge to direct patient care. Work under the direct supervision of a licensed physical therapy professional.

PTA2400 (Arr - Arr) 4 cr. hrs.

Clinical Practice IV

Prerequisite: Acceptance into PTA program and PTA2362 with a minimum grade of C. Final in a series of four focused clinical experiences in an approved clinical site, this six-week, full-time (40 hours/week) clinical provides the student with a culminating opportunity to apply technical skills in a clinical setting before entering the workforce. Emphasis is on appropriate professional behaviors, working as a member of a health care team, and continuing to connect theoretical knowledge to direct patient care. Work under the direct supervision of a licensed physical therapy professional.

READING

RDG0750 (3 - 0) 3 cr. hrs.

Introduction to College Reading

Prerequisite: ACT score of 0-11 or Accuplacer Next Generation reading score of 200-222.

The focus of this course is to develop vocabulary and improve comprehension. Additional areas of emphasis include developing personal fluency and reading independence.

RDG0900 (3 - 0) 3 cr. hrs.

College Reading & Study Skills

Prerequisite: One of the following: (1) an ACT reading score 12-17, or 223-249 on the Accuplacer Next Generation reading, or (2) a minimum high school grade point average of 2.8 AND a minimum ACT reading score of 10, or a minimum Accuplacer Next Generation reading score of 217, or (3) RDG0750 with a minimum grade of C.

Designed to help students develop higher-level reading and thinking skills applicable in a variety of settings. Coursework focuses on increasing reading efficiency through the improvement of vocabulary and comprehension. Additionally, emphasis is placed on building study skills germane to college-level coursework.

SOCIOLOGY

SOC1130 (3 - 0) 3 cr. hrs.

General Sociology

MOTR SOC1101



Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. Systematically examines behavior and human groups, particularly the influence of culture, socialization, social structure, stratification, social institutions, differentiated by race, ethnicity, gender, class, region, and sociocultural change upon people's attitudes and behaviors.

SOC1540 (3 - 0) 3 cr. hrs.

Intro to Cultural Anthropology

MOTR ANTH201



Introduction to the study of human cultures which aims to demonstrate how the basic concepts and techniques developed by anthropologists help us understand societies of various degrees of complexity. Major goals are increased awareness of the diversity and flexibility of human cultures through a comparison of marriage and family, economic, political, religious and language systems.

SOC1620 (3 - 0) 3 cr. hrs.

Human Diversity

Designed to promote better understanding and appreciation of human differences through

comparison of diverse populations based on value systems, cultural and ethnic influences, communication styles, socioeconomic factors, health risks, disabilities, life stages and other types of diversity. Provides a multidisciplinary knowledge base and perspectives that include the study of cultural factors that influence human behavior and relationships to help the student interact more effectively and sensitively with people from diverse backgrounds.

SOCIAL WORK

SWK1000 (3 - 0) 3 cr. hrs.

Introduction to Social Work

Prerequisite: Must have met one of the following: (1) a minimum score of 18 on the ACT reading, or 250 on the Accuplacer Next Generation reading, or (2) a minimum ACT reading score of 16, or Accuplacer Next Generation reading score of 240, AND a 2.8 cumulative high school grade point average or (3) or a minimum grade of C in RDG0900, ENG0990, or ENG0090, or (4) concurrent enrollment in RDG 0900, or (5) have earned 24 college-level semester credit hours. A survey course designed to introduce the student to the field of social work. Offers an overview of the settings in which social workers practice, the populations they serve, and the various problems they address. Major topics include the history and development of the social work profession, foundations of knowledge, and professional values and ethics.

SWK2000 (3 - 0) 3 cr. hrs.

Theories & Skills in Helping

Prerequisites: PSY1130 and SOC1130 with a minimum grade of C. Introduction to the methodology used in the helping profession with emphasis on effective interpersonal communication, interviewing, and development of basic helping skills. A process-oriented approach to solving individual, family, and community problems will be employed.

SWK2020 (3 - 0) 3 cr. hrs.

Policy and Politics

Prerequisite: SOC1130 with a minimum grade of C. Provides an examination of social welfare policy development. Will focus on historical factors, value assumptions, and social-political economic contexts. Specific social issues in the field of human services will be explored and related to policy development. The processes and skills necessary for examination and evaluation of programs/policies (federal, state, local) will be emphasized.

TECHNOLOGY

TEC1000 (Arr - Arr) 6 cr. hrs.

Machine Shop I

Introduction to basic machine tool technology. Includes safety practices, elementary blueprint reading, layout and bench work, and use

of machine tools.

TEC1040 (Arr - Arr) 3 cr. hrs.

Technical Writing

Prerequisite: One of the following: (1) ENG0920 or ENG1330 with a minimum grade of C, or (2) instructor consent. A modular approach to technical writing. Students will gain skills and confidence researching, reading and writing technical documents using an ethical approach to technical communication.

TEC1100 (Arr - Arr) 3 cr. hrs.

Technical Internship I

Prerequisite: Instructor consent. Supervised 90-hour occupational experience in local business, municipal or governmental agencies.

TEC1160 (Arr - Arr) 6 cr. hrs.

Machine Shop II

Prerequisite: TEC1000 with a minimum grade of C. A continuation of TEC1000 involving greater depth in the use of grinders, drill presses, lathes, milling machines, and shapers. Offered by Mineral Area College at the UniTec Career Center.

TEC1200 (3 - 0) 3 cr. hrs.

Architectural Design and Drafting

Prerequisite: TEC1300 or instructor consent. The design and development of working drawings for architectural and industrial facilities. Topics included are: materials, structures, specifications, aesthetics, construction principles, developing models, cost estimating and building codes.

TEC1300 (3 - 0) 3 cr. hrs.

Computer Aided Design/Drafting

Devoted to learning basic operation of a microcomputer-based CAD/D system. Fundamentals of system operation, commands, and interpreting mechanical parts will be stressed.

TEC1320 (3 - 0) 3 cr. hrs.

Advanced Comp Aided Design/Drafting

Prerequisite: TEC1300 with a minimum grade of C or instructor consent. A continuation of TEC1300 with emphasis on development of complex drawings for different engineering specialties.

TEC1340 (3 - 0) 3 cr. hrs.

CAD/D Special Application Programs

Prerequisite: TEC1300 with a minimum grade of C. This course will enhance the student's ability to utilize all CAD systems. Systems will include: SolidWorks, AutoCAD, and/or Inventor.

TEC1390 (Arr - Arr) 6 cr. hrs.

Machine Shop III

Prerequisites: TEC1000 and TEC1160 with a minimum grade of C. A study of advanced machine tool operations with special emphasis on project planning and quality and quantity management. Offered by Mineral Area College at UniTec Career Center.

TEC1415 (0 - 0) 3 cr. hrs.

Industrial Maintenance Technology

Focuses on developing entry level knowledge of maintenance, troubleshooting, and repair abilities of multi skilled maintenance personnel. Student learning experiences will include lecture, group discussion, eLearning, and workbook activities. This course will prepare students for more advanced, hands on learning courses in subjects such as fluid power, electrical, and mechanical work.

TEC1425 (0 - 0) 3 cr. hrs.

Elements of Automation

Looks at how modern manufacturing is affected by the use of robotics and industrial control systems. Students will not only become familiar with common robot types and their application in the manufacturing industry, but will also create a series of program controls for a Flexible Manufacturing System as-well-as explore the use of Automated Guided Vehicles within a modern manufacturing facility.

TEC1430 (Arr - Arr) 6 cr. hrs.

Machine Shop IV

Prerequisites: TEC1000, TEC1160, and TEC1390 with a minimum grade of C. An application of the skills gained in the previous courses in planning, implementing, and executing a complete class production project. Offered by Mineral Area College at UniTec Career Center.

TEC1530 (3 - 0) 3 cr. hrs.

Three-Dimensional Modeling CAD/D

Prerequisite: TEC1300 with a minimum grade of C. A self-paced course devoted to learning three-dimensional drafting and design based on computer CADD/D system. Emphasis will be on wireframe and solid entity design.

TEC1560 (Arr - Arr) 3 cr. hrs.

Manufacturing Process/Estimating

Emphasizes the manufacturing processes and their efficient utilization as applied to engineering products. Topics include: Production Basics, Production Materials, Production Processes, Tool & Equipment Operation, Production Planning & Work Flow, Production Components, Controlling & Documenting Production, Packaging & Distribution Products. A combination of hands-on learning systems, lecture, and e-learning components.

TEC1580 (Arr - Arr) 3 cr. hrs.

Quality Control/Testing Fundamentals

Fundamental, yet comprehensive, coverage of quality control concepts using a practical approach to understand the basic theory. Learning experiences will include: lecture, Amatrol Metrology Learning System, Tooling U, MSSC multimedia and a research project. Areas of emphasis include quality responsibility, quality assurance, control charts, sampling plan, reliability, quality costs, product liability and metrology.

TEC1610 (3 - 0) 3 cr. hrs.

Introduction to Engineering Design

A foundation course in the PLTW Engineering Program. Students are introduced to the engineering profession and a common approach to the solution of engineering problems, an engineering design process. Utilizing the activity project-problem-based (APB) teaching and learning pedagogy, students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills.

TEC1630 (3 - 0) 3 cr. hrs.

Principles of Engineering

Prerequisites: TEC1610 with a minimum grade of C or concurrent enrollment, or instructor consent. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community.

TEC1710 (3 - 0) 3 cr. hrs.

Computer Integrated Manufacturing

Prerequisite: TEC1610 with a minimum grade of C. Deepens the skills and knowledge of an engineering student within the context of efficiently creating the products all around us. Students build upon their Computer Aided Design (CAD) experience through the use of Computer Aided Manufacturing (CAM) software. CAM transforms a digital design into a program that a Computer Numerical Controlled (CNC) mill uses to transform a block of raw material into a product designed by a student. Students learn and apply concepts related to integrating robotic systems such as Automated Guided Vehicles (AGV) and robotic arms into manufacturing systems.

TEC1720 (Arr - Arr) 3 cr. hrs.

Mechanisms

Prerequisite: TEC1900 or MAT0950 or higher level math course with a minimum grade of C. Study of utilizing sources of applying power transmission principles to basic mechanical components, fundamental rotary motion and linear and angular displacements.

TEC1770 (Arr - Arr) 3 cr. hrs.

Intro to Computer Numerical Control

Prerequisite: TEC1160 with a minimum grade of C or instructor consent. Introductory concepts associated with computer numerical control (CNC) machining. Topics covered include NC materials, tooling, machining processes, tool and workpiece setup, programming concepts, job planning, and shop and machine safety. All concepts include training on both CNC mill and lathe.

TEC1780 (Arr - Arr) 3 cr. hrs.

Blueprint Reading

An introductory course for all Technology students. Interpret mechanical, civil, structural, plumbing, architectural and electrical/electronic schematic drawings. The ability to take off dimensions and part quantities will be stressed.

TEC1790 (Arr - Arr) 3 cr. hrs.

Basic Computer Numerical Control

Builds upon the introductory material covered in TEC 1770. Topics will focus primarily on 3-axis CNC mill and CNC lathe operations. Students will learn complex machining strategies and CNC programming. Students will be introduced to leading industry CAM software.

TEC1800 (Arr - Arr) 3 cr. hrs.

Advanced Computer Numerical Control

Prerequisite: TEC1790 with a minimum grade of C. Gain a more robust understanding of topics covered in previous machine tool courses. Students will continue their use of industry leading CAM software and will gain a deeper knowledge of fixturing, advanced probing and inspection, and are introduced to the 4th axis operations.

TEC1810 (Arr - Arr) 2 cr. hrs.

Applied Comp Numerical Control

Prerequisite: TEC1790 with a minimum grade of C. Concludes student training in CNC by enriching their understanding of machining and CNC concepts by applying all previous requisite skills and knowledge utilizing real and practical production projects. CAM software will be emphasized and students will be introduced to 5th axis operations along with palletizing multiple parts with a single program.

TEC1880 (3 - 0) 3 cr. hrs.

Basic Machine Tool

A basic course introducing students to machine tool technology. Includes measurement and layout, bench work, grinding and finishing machines.

TEC1890 (3 - 0) 3 cr. hrs.

Advanced Basic Machine Tool

Prerequisites: TEC 1880. An advanced course for students who have completed Basic Machine Tool.

TEC1900 (3 - 0) 3 cr. hrs.

Technical Mathematics I

College applied mathematics for students majoring in technology. Covers the following mathematical concepts as they relate to the field of technology: Basic Mathematical Concepts, Signed Numbers and Powers, Metric System, Polynomials, Equations and Formulas, Ratios and Proportions, Geometry and Basic Statistics.

TEC1910 (3 - 0) 3 cr. hrs.

Technical Mathematics II

Prerequisite: TEC1900 with a minimum grade of C. A continuation of TEC 1900. Covers the following mathematical concepts as they relate to the field of technology: Algebraic Concepts (graphing equations, systems of linear equations, factoring algebraic expressions, quadratic equations), Right Triangle Trigonometry, Binary/Hexadecimal Numbers, Measurement and Trigonometry with Any Angle.

TEC1920 (3 - 0) 3 cr. hrs.

Teamwork/Work Communication

Provides students an overview of the soft skills needed to communicate effectively on the job in the manufacturing sector. Emphasis is placed on working in a team environment, communication styles, and group problem-solving strategies. The use of soft skills in a digital workplace will also be addressed.

TEC1930 (3 - 0) 3 cr. hrs.

General Industry Safety

Provides students with an introduction to industrial safety principles, concepts, and practices. Emphasis is placed on industrial safety, OSHA, and environmental safety regulations. Students will demonstrate the ability to clearly articulate safety principles and practices, governmental and regulatory compliance, and environmental safety practices.

TEC1950 (1 - 0) 1 cr. hrs.

CLA/CLT Assessment Prep

Prerequisites: TEC1920, TEC1930, and CIS1610 with a minimum grade of C. Required for students preparing to take the Manufacturing Skills Standards Council's (MSSC) Certified Logistics Associate (CLA) and/or Certified Logistics Technician (CLT) assessment. Students will be exposed to MSSC learning material through textbooks and lecture. Course material will include assessment-taking protocol, supply chain logistics at the foundational and mid-levels, and will align with MSSC standard for CLA and CLT. Required as the capstone (last course) prior to taking the CLA/CLT assessments.

TEC2030 (3 - 0) 3 cr. hrs.

Basic Fluid Power

Introductory course designed to provide the technical information needed as a foundation for working with fluid power components and systems. Students will learn the "how" and "why" of various operating principles essential to understanding theory, design and function. Hands-on training will be incorporated wherever practical.

TEC2050 (3 - 0) 3 cr. hrs.

Engineering Design and Development

Prerequisite: TEC1610, TEC1630 and TEC1710 with a minimum grade of C. Introduces students to design and development of a product needed to solve a problem. Students, working in design teams, will be required to use critical thinking to design a component from perception through to a working prototype in order to prove out the solution. Students are asked to work from a set design specifications to develop a design approach, building a working prototype, test to the design parameters, write a report, and give a presentation to a review board. The report must include enough detail to produce the solution.

TEC2120 (Arr - Arr) 3 cr. hrs.

Technical Internship II

Prerequisite: TEC1100 with a minimum grade of C. A supervised occupational experience with local business. Students shall perform 90 hours of on-the-job training under the direction of a qualified supervisor in the location approved by instructor.

THEATRE

THE1000 (3 - 0) 3 cr. hrs.

Introduction to Theatre

MOTR THEA100A



Explore a comprehensive introduction to the art of theatre examining the roles and contributions of theater artists including the actor, the director, the designers, the playwright, and the critic. Develop projects in these areas and attend theatre productions.

THE1040 (3 - 0) 3 cr. hrs.

Beginning Acting

MOTR PERF100 - 2019



Develop methods of improving vocal and physical skills for performance. Students receive training in voice, movement, characterization, and play analysis. Theater games, improvisations, and short dramatic scenes are emphasized.

THE1080 (Arr - Arr) 3 cr. hrs.

Children's Theatre (Creative Drama)

MOTR THEA100B - 2019



Explore the history and purpose of creative dramatics in the school through performance and study. Students will rehearse and perform one-act plays at area elementary schools.

THE1100 (Arr - Arr) 1 cr. hrs.

Directed Studies in Theatre Arts

Learn varied aspects of the theatre under the direct supervision of the theatre director or technical director in conjunction with Mineral Area College's theatrical productions. May include acting, directing, costuming, makeup, scenic design and construction, stage lighting, and management. A maximum of six credit hours may be applied towards graduation if the course is repeated.

THE1120 (3 - 0) 3 cr. hrs.

Stagecraft

MOTR PERF104S - 2019



Learn the operation of equipment used in technical theater. Areas include scenery, lighting, sound, properties and makeup. Lecture, demonstration and hands-on lab experience.

THE1200 (3 - 0) 3 cr. hrs.

Introduction to Literature: Drama

MOTR LITR100D - 2019



Explore analysis of dramatic form through the study of representative genres of theater to aid student development of critical capabilities for reading drama. Tragedy, comedy, tragicomedy, farce, melodrama, musicals, absurdism and other styles will be studied using specific scripts, as well as the cultures that gave rise to these movements. Reading intensive course.

THE1300 (3 - 0) 3 cr. hrs.

Directing I

Explore an introduction to the position of director in theatre. Learn how to appraise their resources, select a play, cast, block, work in union with the technical areas to present a single point of view, assist actors in creating characters, integrate a group of individuals into a cohesive cast, create moving stage pictures and present a production for performance.

THE2020 (3 - 0) 3 cr. hrs.

Script Analysis

MOTR PERF103SA - 2019



Research processes necessary to the consideration of any play prior to production, which is necessary for all artistic roles that are involved in creating a theatrical show. Students will take understanding, inspiration, and insight from the deconstruction of a playwright's work and learn to isolate the plot, characters, actions, and design necessities and possibilities.

THE2040 (3 - 0) 3 cr. hrs.

Acting II

Explore character development, script analysis, and commitment to the role will be the class focus. Concentration will be on a short scene and monologue work and critical studies of acting performances on video tape and film.

THE2060 (3 - 0) 3 cr. hrs.

Playwriting

MOTR PERF103P - 2019



Enhance a student's ability to communicate through dialogue. Study excerpts from scripts, create new material and analyze each other's work. The 10-minute play and one-act formats will be used.

THE2120 (3 - 0) 3 cr. hrs.

World Drama

MOTR THEA106 - 2020



Learn to understand and appreciate the dramatic form through the study of representative plays through theatrical history—from the Greeks, Medieval, Renaissance, Early European, Modern British and American Drama. Classes are discussion-oriented and the play script is emphasized as a means to dramatic productions. Reading intensive course. Meets cultural diversity requirement.

THE2140 (3 - 0) 3 cr. hrs.

Theatre History I

MOTR THEA104 - 2020



Examine the study of the earliest theatre, Greek through Shakespeare, and the primary theatre movements in the first 2,300 years of recorded theatre. Meets cultural diversity requirement.

THE2200 (3 - 0) 3 cr. hrs.

Theatre History II

MOTR THEA105 - 2020



Examine theatre after Shakespeare to the present and study major movements in theatre from the mid-1600s to contemporary plays. Primary emphasis will be on American and European theatre. Secondary coverage will include Asian and oriental theatre. Meets cultural diversity requirement.

WELDING TECHNOLOGY

WLD1025 (0 - 0) 7 cr. hrs.

Aluminum Welding

Prerequisite: WLD1305 and WLD1605 with a minimum grade of C. Focuses on the tools, techniques, and applications of welding aluminum. AWS standards will be utilized where applicable throughout this course. The course format will include lecture, class demonstrations, and hands-on activities where applicable.

WLD1205 (0 - 0) 7 cr. hrs.

Cutting and Fabrication

Prerequisite: WLD1305 and WLD1405 and WLD1505 and WLD1605 with a minimum grade of C. Focuses on layout, fit, fabrication, and assembly where applicable of welded components. Students will learn the necessary setup and operation of equipment used in the welding industry. The course format will include lecture, class demonstrations, and hands-on activities where applicable.

WLD1305 (0 - 0) 7 cr. hrs.

Adv Gas Shield Metal Arc Welding

Prerequisite: Instructor approval. Focuses on the tools, techniques, and applications of gas shield metal arc welding. AWS standards will be utilized where applicable throughout this course. The course format will include lecture, class demonstrations, and hands-on activities where applicable.

WLD1405 (0 - 0) 7 cr. hrs.

Advanced Flux Core Arc Welding

Prerequisite: Instructor approval. Focuses on the tools, techniques, and applications of FCAW. AWS standards will be utilized where applicable throughout this course. The course format will include lecture, class demonstrations, and hands-on activities where applicable.

WLD1505 (0 - 0) 7 cr. hrs.

Advanced Stick Welding

Prerequisite: Instructor approval. Focuses on the tools, techniques, and applications of stick welding. AWS standards will

be utilized where applicable throughout this course. The course format will include lecture, class demonstrations, and hands-on activities where applicable.

WLD1555 (Arr - Arr) 4 cr. hrs.

Advanced Stick Welding I

Prerequisite: Instructor approval. A 56-hour course that will focus on Shielded Metal Arc Welding (SMAW) and its associated applications. Students will learn foundational skills in this process. AWS standards will be utilized where applicable throughout the course. The course format will include lectures, class demonstrations, and hands-on activities where applicable to develop welding skills.

WLD1560 (Arr - Arr) 3 cr. hrs.

Advanced Stick Welding II

Prerequisite: Instructor approval and WLD1550 with a minimum grade of C. A 40-hour course that will focus on Shielded Metal Arc Welding (SMAW) and its associated applications. Students will learn advanced skills in this process. AWS standards will be utilized where applicable throughout the course. The course format will include lectures, class demonstrations, and hands-on activities where applicable to develop welding skills.

WLD1605 (0 - 0) 7 cr. hrs.

Advanced Gas Tungsten Arc Welding

Prerequisite: Instructor approval. Focuses on the tools, techniques, and applications of TIG Welding. AWS standards will be utilized where applicable throughout this course. The course format will include lecture, class demonstrations, and hands-on activities where applicable.

WLD1800 (0 - 0) 2 cr. hrs.

Welding Foundations

A 24-hour course which will provide the student with introductory knowledge of skills needed to be successful with all welding and fabrication applications. Course content will include blueprint reading, technical mathematics, and metallurgy. The course format will include lecture, class demonstrations, and hands-on activities where applicable.