



General Catalog for 2015-2016
July 2015 – VOL. LXXVII, No. 1

Addendum

Admissions & Academic Regulations

Revision Page 20

Revise TSI Assessment Scores

From:

TSI Assessment:

Reading: 351

Math: 350

Writing: 363 combined with an essay
score of 4; or an essay score of 5

To:

Reading: 351

Math: 350

Writing: At least a 350 **and** essay score at least a 5; OR At least a 363 **and** an essay score of 4;
OR Less than a 350 **and** an ABE Diagnostic at least a 4 **and** essay score of at least a 5.

Addition Page 32

Victoria College Core Curriculum Courses

Add: MATH 2412, GEOL 1303, GEOL 1345, GEOL 1347, MUSI 1307

Victoria College Core Curriculum Courses

Core Component	Core #	Course Selection		Minimum Hours Required
COMMUNICATION	010	Select 1	ENGL 1301	6
		Select 1	SPCH 1315, 1318	
MATHEMATICS	020	Select 1	MATH 1314, 1316, 1324, 1332, 1342, 2312, 2412, 2413	3*
LIFE AND PHYSICAL SCIENCES	030	Select 2	BIOL 1406, 1407, 1408, 1409, 2306, BIOL 2404, BIOL 2420	6* + †
			CHEM 1406, 1411, 1412	
			ENVR 1301, GEOL 1303, 1305, 1345, 1347, 1403, 1404	
			PHYS 1315, 1401, 1402, 1410, 2425, 2426	
LANGUAGE, PHILOSOPHY & CULTURE	040	Select 1	ENGL 2322, 2323, 2327, 2328	3
CREATIVE ARTS	050	Select 1	ARTS 1301, 1303, 1304	3
			DRAM 1310	
			MUSI 1304, 1307, 1306, 1307, 1310	
AMERICAN HISTORY	060	Select 2	HIST 1301, 1302, 2301	6
GOVERNMENT/ POLITICAL SCIENCE	070	Select 2	GOVT 2305, 2306	6
SOCIAL AND BEHAVIORAL SCIENCES	080	Select 1	ECON 2301, 2302, GEOG 1303	3
			PSYC 2301, SOCI 1301	
COMPONENT AREA OPTION	090	Select 6 SCH	Any course listed above except ENGL 1301, GOVT 2305 and GOVT 2306	6
			BCIS 1305 (3) or COSC 1301 (3)	
			EDUC 1300 (3)	
			ENGL 1302 (3)	
			ENGL 2311 (3)	
			MATH 1325 (3)	
			*OTHER HOURS – BIOL 1406 (1), 1407 (1), 1408 (1), 1409 (1), 2402 (1), 2420 (1), CHEM 1406 (1), 1411 (1), 1412 (1), GEOL 1403 (1), 1404 (1), MATH 2413 (1), PHYS 1401 (1), 1402 (1), 1410 (1), 2425 (1), 2426 (1)	

* Additional hours fall to Component Area Option or will fulfill degree requirements.

† Associate of Arts Degree - completion of two science courses with at least one course being a lab science course (may be used to satisfy core requirements).

‡ Associate of Science Degree - completion of two lab science courses (may be used to satisfy core requirements).

Addition Page 33

Add:

Graduates with a Level 1 Certificate or higher are eligible to participate in the graduation ceremony.

Degree/Certificate Requirements

Graduation Application

A student who is a candidate for graduation may apply at the Welcome Center. Victoria College will award degrees when earned as determined by a curriculum audit against the student's declared major.

Graduates with a Level 1 Certificate or higher are eligible to participate in the graduation ceremony.

Addition Page 34

Add:

6. Completion of either ENGL 1302 or ENGL 2311

7. Completion of BCIS 1305 or COSC 1301

Renumber the remaining numbers accordingly.

Associate of Arts Degree

To earn an associate of arts degree, students must complete the following requirements:

1. Unconditional admission or the removal of all entrance conditions.
2. Completion of a **minimum of 60 semester credit hours** with at least a 2.0 grade point average. Only Victoria College courses will be used in grade point average calculation.
3. Completion of at least 25 percent of semester credit hours earned through instruction at Victoria College.
4. Meet minimum standards of all areas of the assessment test to satisfy the Texas Success Initiative or meet exemption requirements.
5. Completion of Core Curriculum (42 hours). See page 32.
6. Completion of either ENGL 1302 or ENGL 2311
7. Completion of BCIS 1305 or COSC 1301
8. Completion of one literature course (3 hours) **in addition to core requirements**.
Select one course: ENGL 2322, 2323, 2327, 2328, 2332, 2333
9. Completion of two science courses with at least one course being a lab science course (may be used to satisfy core requirements).

Addition Page 35

Add:

6. Completion of either ENGL 1302 or ENGL 2311
 7. Completion of BCIS 1305 or COSC 1301
- Renumber the remaining numbers accordingly.

Associate of Science Degree

To earn an associate of science degree, students must complete the following requirements:

1. Unconditional admission or the removal of all entrance conditions.
2. Completion of a **minimum of 60 semester credit hours** with at least a 2.0 grade point average. Only Victoria College courses will be used in grade point average calculation.
3. Completion of at least 25 percent of semester credit hours earned through instruction at Victoria College.
4. Meet minimum standards of all areas of the assessment test to satisfy the Texas Success Initiative or meet exemption requirements.
5. Completion of Core Curriculum (42 hours). See page 32.
6. Completion of either ENGL 1302 or ENGL 2311
7. Completion of BCIS 1305 or COSC 1301
8. Completion of one mathematics course (3-4 hours) **in addition to core requirements**. Select one course: MATH 1314, 1316, 1324, 1325, 1332, 1342, 2312, 2413, 2414.
9. Completion of two lab science courses (may be used to satisfy core requirements).

General Regulations

Addition Page 63

Add: "Honors and Awards" to the directory information

Directory Information

The College will release the following items of directory information (as defined by the Family Education Rights and Privacy Act) without the written consent of the student: name, address, telephone number, date of birth, major, dates of attendance, degrees awarded, honors and awards, full and part-time status, enrollment and withdrawal verifications, student classification, and most recent previous institution attended. The College reserves the right, under the Family Education Rights and Privacy Act, to publish this information and routinely furnishes it to loan agencies, insurance companies, prospective employers, family members, etc. Students are responsible for informing the Admissions & Records Office in writing each semester if the above information is not to be released.

Tuition & Fees

Addition Page 69

Add: Course fees EDUC 1300 - \$71.00 and SDEV 0301 - \$71.00

Course Fees

EDUC 1300	71.00
SDEV 0301	71.00

Programs of Study Career, Health, and Technical Professions

Addition Page 110

Add Industrial Maintenance Mechanic, Machining Technology, & Emergency Medical Services to the Degrees listing

Two-Year Associate of Applied Science Degrees

Business Management

Criminal Justice - Law Enforcement

Electronics Technology/Instrumentation-Electronics Technology Specialization

Electronics Technology/Instrumentation-Instrumentation Technician Specialization

Emergency Medical Services

Industrial Maintenance Mechanic

Machining Technology

Fire Science

Nursing

Physical Therapist Assistant

Process Technology

Respiratory Care

Addition Page 111

Add Industrial Maintenance Mechanic, Process Technology, & Paramedic to the Certificate listing

Certificates (Indicates Level 1 Certificate)*

Basic Peace Officer

Basic Firefighter*

Electronics Technology/Instrumentation-Instrumentation*

Instrumentation/Measurement Technician*

Industrial Maintenance Mechanic

IT & LAN Support Technician*

Office Management*

Paramedic

Process Technology

Vocational Nursing

Welding - Basic*

Welding - Advanced*

Addition Page 116

Certificate - Basic Peace Officer Course

Add CJLE 1391 Basic Peace Officer V - 3 credit hours and change total credit hours to 24.

			Credit Hours
¹ SDEV	0301	Learning Frameworks	0
*CJLE	1506	Basic Peace Officer I	5
*CJLE	1512	Basic Peace Officer II	5
*CJLE	1518	Basic Peace Officer III	5
*CJLE	1524	Basic Peace Officer IV	5
*CJLE	1391	Basic Peace Officer V	3
CJLE	1132	Physical Fitness for Law Enforcement	1
			24

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AAS Criminal Justice - Law Enforcement - Degree Plan

- Change Pre-Semester, First, Second, Third, Fourth Semesters to Summer, Fall, Spring, Fall, Spring
- Move ENGL 2311 to Sophomore Year Spring Semester
- Move Humanities/Visual & Performing Arts Elective from Core Curriculum to Sophomore Year Fall Semester
- Change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective in the Sophomore Year Fall Semester

CRIMINAL JUSTICE - LAW ENFORCEMENT - DEGREE PLAN

SUMMER SESSION			Credit Hours
¹ SDEV	0301	Learning Frameworks	0

FRESHMAN YEAR

FALL SEMESTER			Credit Hours
CJLE	1506	Basic Peace Officer I	5
CJLE	1512	Basic Peace Officer II	5
CJLE	1518	Basic Peace Officer III	5
CJLE	1524	Basic Peace Officer IV	5
CJLE	1132	Physical Fitness for Law Enforcement	1
CJLE	1329	Basic Peace Officer V	3

SPRING SEMESTER			Credit Hours
CRIJ	1301	Introduction to Criminal Justice	3
CRIJ	2313	Correctional Systems & Practices	3
ENGL	1301	Composition I	3

SOPHOMORE YEAR

FALL SEMESTER			Credit Hours
GOVT	2305	Federal Government	3
CRIJ	2314	Criminal Investigation	3
CRIJ	1310	Fundamentals of Criminal Law	3
MATH	Elective from Core Curriculum		3
Language, Philosophy & Culture/Creative Arts Elective from Core Curriculum			3

SPRING SEMESTER			Credit Hours
CRIJ	1306	Court Systems and Practices	3
+CRIJ	2328	Police Systems and Practices	3
DAAC	1317	Basic Counseling Skills	3
ENGL	2311	Technical Writing	3

Total Degree Credit Hours 60

¹ Required for all first-time-in-college students. EDUC 1300 may be substituted for SDEV 0301.

+ Capstone course

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AAS Electronics Technology

Sophomore Year - Spring Semester change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective

SOPHOMORE YEAR

SPRING SEMESTER	Credit Hours
*CETT 1357 Linear Integrated Circuits	3
Language, Philosophy & Culture/Creative Arts Elective from Core Curriculum	3
Social and Behavior Sciences Elective from Core Curriculum	3
INTC 2336 Distributed Control & Programmable Logic	3
PHYS 1402 General College Physics II	4
	16

Revision Page 121

Certificate - Instrumentation

CERTIFICATE IN INSTRUMENTATION

SUMMER SEMESTER	Credit Hours
¹ SDEV 0301 Learning Frameworks	0

FALL SEMESTER	Credit Hours
CETT 1325 Digital Fundamentals	3
CETT 1302 Electricity Principles	3
INTC 1343 Application of Industrial Automatic Control	3
INTC 1356 Instrumentation Calibration	3
* INTC 1301 Principles of Industrial Measurements	3
	15

SPRING SEMESTER	Credit Hours
CETT 1341 Solid State Circuits	3
CETT 1349 Digital Systems	3
INTC 1355 Unit Operations	3
INTC 2336 Distributed Control & Programmable Logic	3
	12

Total Certificate Credit Hours 27

¹ Required for all first-time-in-college students. EDUC 1300 may be substituted for SDEV 0301.

* Capstone course

Revision Page 122

Certificate - Instrumentation/Measurement Technician

SPRING SEMESTER		Credit Hours
¹ SDEV	0301 Learning Frameworks	0
CETT	1325 Digital Fundamentals	3
CETT	1302 Electricity Principles	3
PTAC	1302 Introduction to Process Technology	3
		9

SUMMER SEMESTER		Credit Hours
INTC	1357 AC/DC Motor Control	3

FALL SEMESTER		Credit Hours
CETT	1341 Solid State Circuits	3
INTC	1356 Instrumentation Calibration	3
+INTC	1301 Principles of Industrial Measurements	3
		9

Total Certificate Credit Hours 21

¹ Required for all first-time-in-college students. EDUC 1300 may be substituted for SDEV 0301.

* Capstone course

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AAS Instrumentation

Freshman Year - Spring Semester change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective

FRESHMAN YEAR

SPRING SEMESTER		Credit Hours
CETT	1341 Solid State Circuits	3
INTC	1301 Principles of Industrial Measurements I	3
	Language, Philosophy & Culture/Creative Arts Elective from Core Curriculum	3
	Social and Behavioral Sciences Elective from Core Curriculum	3
CETT	1349 Digital Systems	3

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Paramedic Certificate

- Prerequisites - Remove HITT 1305
- Freshman Year - Fall Semester add EMSP 2206 Emergency Pharmacology
- Freshman Year - Spring Semester change total credit hours from 12 to 13.
- Freshman Year - Summer Session change EMSP 2338 to EMSP 2305.

PARAMEDIC CERTIFICATE

PREREQUISITES

		Credit Hours	
EMSP	1501	Emergency Medical Technician	5
EMSP	1160	Clinical, Emergency Medical Technician	1
'SDEV	0301	Learning Frameworks	0
			6

FRESHMAN YEAR

FALL SEMESTER

		Credit Hours	
EMSP	2206	Emergency Pharmacology	2
EMSP	1438	Intro to Advanced Practice	4
EMSP	1356	Patient Assessment & Airway Management	3
EMSP	1355	Trauma Management	3
EMSP	1261	Clinical, Paramedic I	2
			14

SPRING SEMESTER

		Credit Hours	
EMSP	2444	Cardiology	4
EMSP	2434	Medical Emergencies	4
EMSP	2330	Special Populations	3
EMSP	2262	Clinical, Paramedic II	2
			13

SUMMER I and/or II SESSION

		Credit Hours	
+EMSP	2243	Assessment Based Management	2
EMSP	2305	EMS Operations	3
+EMSP	2363	Clinical, EMS Capstone	3
			8

Total Certificate Credit Hours 41

Revision Page 127

AAS Emergency Medical Services

- Freshman Year - Fall Semester change HRPS 2200 to EMSP 2206
- Sophomore Year - Spring Semester change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective

FRESHMAN YEAR

FALL SEMESTER		Credit Hours	
EMSP	2206	Emergency Pharmacology	2
EMSP	1438	Introduction to Advanced Practice	4
EMSP	1356	Patient Assessment & Airway Management	3
EMSP	1355	Trauma Management	3
EMSP	1261	Clinical, Paramedic I	2
			14

SOPHOMORE YEAR

SPRING SEMESTER		Credit Hours	
Language, Philosophy & Culture/Creative Arts Elective from Core Curriculum		3	
PSYC	2301	General Psychology	3
EMSP	2352	Emergency Medical Service Research	3
			9

Revision Page 130

AAS Fire Science

Third Semester - Change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective

THIRD SEMESTER		Credit Hours	
FIRT	1333	Fire Chemistry I	3
FIRT	1329	Building Codes & Construction	3
Speech Elective from Core Curriculum		3	
Social and Behavioral Science Elective from Core Curriculum		3	
Language, Philosophy & Culture/Creative Arts Elective from the Core Curriculum		3	

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AAS Industrial Maintenance Mechanic

Sophomore Year - Spring Semester change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective

SOPHOMORE YEAR

SPRING SEMESTER		Credit Hours	
INMT	2301	Machinery Installation	3
*MCHN	2307	Millwright IV	3
Social and Behavioral Science Elective from Core Curriculum		3	
INMT	2345	Industrial Troubleshooting	3
Language, Philosophy & Culture/Creative Arts Elective from the Core Curriculum		3	

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AAS Machining Technology

Freshman Year - Spring Semester change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective

FRESHMAN YEAR

SPRING SEMESTER	Credit Hours
MCHN 1308 Basic Lathe	3
MCHN 1313 Basic Milling Operations	3
MCHN 1302 Print Reading for Machining Trades	3
Language, Philosophy & Culture/Creative Arts Elective from the Core Curriculum	3
Speech Elective from Core Curriculum	3

Revision Page 135

AAS Machining Technology

Sophomore Year - Fall Semester replace MCHN 1352 with MCHN 2341

SOPHOMORE YEAR

FALL SEMESTER	Credit Hours
MCHN 1358 Intermediate Lathe Operations	3
MCHN 2302 Intermediate Milling Operations	3
MCHN 2341 Advanced Machining I	3
MCHN 2344 CNC Programming	3
Social and Behavioral Science Elective from Core Curriculum	3
	15

Revision Page 138

AAS Nursing

Level IV - Change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective

LEVEL IV

SEMESTER IV	Credit Hours
*RNSG 2535 Integrated Patient Care Management	5
*RNSG 2363 Clinical IV-Registered Nursing/Registered Nurse	3
*Language, Philosophy & Culture/Creative Arts Elective	3

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Nursing - LVN-ADN Transition

Semester III - Change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective in the

SEMESTER III	Credit Hours
*RNSG 2535 Integrated Patient Care Management	5
*RNSG 2363 Clinical IV - Registered Nursing/Registered Nurse	3
*Language, Philosophy & Culture/Creative Arts Elective	3

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AAS Physical Therapist Assistant

Spring I - Change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/
Creative Arts Elective

SPRING I	Credit Hours
PTHA 1431 Physical Agents	4
PTHA 2409 Therapeutic Exercise	4
PSYC 2301 General Psychology	3
Language, Philosophy & Culture/Creative Arts Elective from the Core Curriculum	3

Revision Page 147

Process Technology Certificate

Remove footnote: ² Completion of Texas Success Initiative Math section is required.

PROCESS TECHNOLOGY CERTIFICATE	
'SDEV 0301 Learning Frameworks	0
PTAC 1302 Intro to Process Technology	3
PTAC 1410 Process Technology I - Equipment	4
PTAC 2420 Process Technology II - Systems	4
PTAC 2438 Process Technology III - Operations	4
PTAC 1432 Process Instrumentation I	4
PTAC 2446 Process Troubleshooting	4

Total Certificate Credit Hours 23

¹ Required for all first-time-in-college students. EDUC 1300 may be substituted for SDEV 0301.

Revision Page 148

AAS Process Technology

- Freshman Year - Fall Semester remove the following footnotes:
 - ² Completion of Texas Success Initiative Math section is required.
 - ³ Completion of Texas Success Initiative Reading and Writing sections required.
- Sophomore Year - Fall Semester change Humanities/Visual & Perform in Art Elective to Language, Philosophy & Culture/Creative Arts Elective
- Sophomore Year - Fall Semester change PHYS 1301 to PHYS 1310 and remove the ⁴⁴ notation from PTAC 2314.

FALL SEMESTER	Credit Hours
CETT 1302 Electricity Principles	3
PTAC 1302 Introduction to Process Technology	3
PTAC 1308 Safety, Health, and Environment I	3
ENGL 1301 Rhetoric & Composition	3
MATH 1332 Contemporary Mathematics OR	
MATH 1314 College Algebra	3
	15

SOPHOMORE YEAR

FALL SEMESTER	Credit Hours
Language, Philosophy & Culture/Creative Arts Elective from Core Curriculum	3
ECON 2301 Principles of Macroeconomics	3
PTAC 2314 Principles of Quality	3
PTAC 2420 Process Technology II - Systems	4
PHYS 1310 Elementary Physics	3
	16

Revision Page 149

Respiratory Care Program

Add the following statement: The program has been placed on probationary accreditation effective November 21, 2015. Based on the 2015 Annual Report of Current Status, the program did not meet the threshold for attrition, (2012-2014 average).

Victoria College's Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, Texas 76021-4244; (817) 283-2835 (www.coarc.com). The program has been placed on probationary accreditation effective November 21, 2015. Based on the 2015 Annual Report of Current Status, the program did not meet the threshold for attrition, (2012-2014 average).

Revision Page 150

AAS Respiratory Care

Prerequisites - Change Creative Arts to Creative Arts & Humanities

PROGRAM PREREQUISITES	Credit Hours
ENGL 1301 Composition I	3
PSYC 2301 General Psychology OR	
SOCI 1301 Introduction to Sociology	3
BIOL 2404 Introductory Anatomy & Physiology OR	4
BIOL 2401 Human Anatomy & Physiology AND	
BIOL 2402 Human Anatomy & Physiology II	
Mathematics - Select 1 course from Victoria College Core Curriculum	3
Creative Arts & Humanities - Select 1 course from Victoria College Core Curriculum	3
¹ SDEV 0301 Learning Frameworks	0
	16

¹Required for all first-time-in-college students. EDUC 1300 may be substituted for SDEV 0301.

Revision Page 151

AAS Respiratory Care

Freshman Year - Spring Semester change BIOL 2310 to RSPT 2310

FRESHMAN YEAR	Credit Hours
SPRING SEMESTER	
RSPT 1431 Respiratory Care Fund II	4
RSPT 1361 Clinical-Respiratory Therapy II	3
RSPT 1272 Clinical Blood Gases	2
RSPT 2310 Cardiopulmonary Disease	3
	12

Addition Page 153

Welding

Add Welding Marketable Skills Certificate

WELDING MARKETABLE SKILLS CERTIFICATE

Credit Hours

WLDG	1421	Welding Fundamentals	4
WLDG	2443	Advanced SMAW	4
WLDG	2406	Intermediate Pipe Welding	4
			12

Course Descriptions

Revision Page 198

Revised EMSP 2243 course description and change EMSP 2338 to EMSP 2305 all other information is correct.

EMSP 2243 ASSESSMENT BASED MANAGEMENT (1,3,0) CREDIT 2
Prerequisite: Admission into the Paramedic Program
Corequisites: EMSP 1355, 1356, 1438, 2330, 2338, 2434, & 2444
 A summarative experience covering comprehensive, assessment-based patient care management for the paramedic level.

EMSP 2305 EMS OPERATIONS (3,0,0) CREDIT 3
Prerequisite: Admission into the Paramedic Program
 Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents.

Addition Page 197

Add EMSP 2206 Emergency Pharmacology

EMSP 2206 EMERGENCY PHARMACOLOGY (2,0,0) CREDIT 2
Prerequisite: Admission into the Paramedic Program
 A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages.

Addition Page 205

Add "Prerequisite: A grade of C or better in MCHN 1325 and DFTG 1325" to HYDR 1345

HYDR 1345 HYDRAULICS & PNEUMATICS (2-2) CREDIT 3
Prerequisite: A grade of C or better in MCHN 1325 and DFTG 1325
 Discussion of the fundamentals of hydraulics and pneumatics, components of each system, and the operations, maintenance, and analysis of each system.

Add "Prerequisite: A grade of C or better in INMT 1305" to INMT 2301

INMT 2301 MACHINERY INSTALLATION (2-4) CREDIT 3
Prerequisite: A grade of C or better in INMT 1305
 Students utilize skills acquired in previous studies. Machinery foundation, locations, installation, and alignment activities are practiced and tested. Emphasis is on the various methods of shaft alignment including laser shaft alignment.

Add "Prerequisite: A grade of C or better in INMT 1305" to INMT 2303

INMT 2303 PUMPS, COMPRESSORS & MECHANICAL DRIVES (2-4) CREDIT 3
Prerequisite: A grade of C or better in INMT 1305
 A study of the theory and operations of various types of pumps and compressors. Topics include mechanical power transmission systems including gears, v-belts, and chain drives.

Revision Page 205 continued

Add "Prerequisite: A grade of C or better in INMT 2303" to INMT 2345

INMT 2345

INDUSTRIAL TROUBLESHOOTING (2-4) CREDIT 3

Prerequisite: A grade of C or better in INMT 2303

An advanced study of the techniques used in troubleshooting various types of industrial equipment to include mechanical, electrical, hydraulic, and pneumatic systems and their control devices. Emphasis will be placed on the use of schematics and diagrams in conjunction with proper troubleshooting procedures.

Revision Page 208

Add "Students who need algebraic-intensive course work as part of their degree requirements must take MATH 0303 upon successful completion of this course." to the end of the course description.

MATH 0402

FOUNDATIONS OF MATHEMATICAL REASONING (4-0) CREDIT 0

Prerequisite: A grade of S, SA, SB, or SC in Math 0305 or a score of 336-349 or ABE level of 5 or 6 on the mathematics section of the TSI Assessment.

Corequisite: EDUC 1300 is preferred unless already taken

This course surveys a variety of mathematical topics needed to prepare students for college level statistics or quantitative reasoning or for algebra-based courses. Topics include: numeracy with an emphasis on estimation and fluency with large numbers; evaluating expressions and formulas; rates, ratios, and proportions; percentages; solving equations; linear models; data interpretations including graphs and tables; verbal, algebraic and graphical representations of functions; exponential models. This course carries institutional credit but will not transfer and will not be used to meet degree requirements. Students who need algebraic-intensive course work as part of their degree requirements must take MATH 0303 upon successful completion of this course.

Revision Page 210

Revise prerequisites for MATH 1314, MATH 1316, and MATH 1324 to "Prerequisite: Meet TSI college readiness standard for algebraic-intensive mathematics (score of 350 on TSI exam or grade of SC or better in MATH 0303)."

MATH 1314#

COLLEGE ALGEBRA (3-0) CREDIT 3 (020/090)

Prerequisite: Meet TSI college readiness standard for algebraic-intensive mathematics (score of 350 on TSI exam or grade of SC or better in MATH 0303)

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

MATH 1316#

PLANE TRIGONOMETRY (3-0) CREDIT 3 (020/090)

Prerequisite: Meet TSI college readiness standard for algebraic-intensive mathematics (score of 350 on TSI exam or grade of SC or better in MATH 0303)

In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included.

MATH 1324# MATHEMATICS FOR BUSINESS & SOCIAL SCIENCES (finite mathematics) (3-0) CREDIT 3 (020/090)
Prerequisite: Meet TSI college readiness standard for algebraic-intensive mathematics (score of 350 on TSI exam or grade of SC or better in MATH 0303)
 The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.

Remove statement "Offered in the fall semester. May be offered in the summer"
 MATH 2412 will be offered in fall and spring.

MATH 2412# PRECALCULUS (3-0) CREDIT 4 (020/090)
Prerequisite: A grade of C or better in MATH 1314 or the equivalent preparation.
Recommend: A grade of C or better in MATH 1316.
 In-depth combined study of algebra, trigonometry, and other topics for calculus readiness.

Remove statement "Offered in the fall semester. May be offered in the summer"
 MATH 2413 will be offered in fall and spring.

MATH 2413# CALCULUS I (4-0) CREDIT 4 (020/090)
Prerequisite: A grade of C or better in MATH 2312 or equivalent preparation (a score of 600 on the math portion of the SAT or a score of 29 on the math portion of ACT).
 Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.

Revise statement "Offered only in spring semester" to "Offered only in fall semester"
 MATH 2414 will be offered in the fall semester to accommodate the MATH 2414 prerequisite for PHYS 2426

MATH 2414# CALCULUS II (4-0) CREDIT 4
Prerequisite: A grade of C or better in MATH 2413.
(Offered only in fall semester)
 Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

Revise statement "Offered only in fall semester" to "Offered only in spring semester"
 MATH 2415 will be offered in the spring semester to accommodate the MATH 2414 prerequisite for PHYS 2426.

MATH 2415# CALCULUS III (4-0) CREDIT 4
Prerequisite: A grade of C or better in MATH 2414.
(Offered only in spring semester)
 Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's theorem, the Divergence theorem, and Stokes' theorem.

Addition Page 211

Add "Prerequisite: A grade of C or better in MCHN 1325" to MCHN 1329

- MCHN 1329** **MILLWRIGHT II (2-4) CREDIT 3**
Prerequisite: A grade of C or better in MCHN 1325
 A continuation to millwright tools including specialty power and precision tools. A study of the property of metals and the installation of packing. Emphasis on safety in the accomplishment of these activities.

Delete MCHN 1352 Intermediate Machining and replace it with MCHN 2341 Advanced Machining I

- MCHN 2341** **ADVANCED MACHINING I (2-4) CREDIT 3**
Prerequisite: A grade of C or better in MCHN 1341
 A study of advanced lathe and milling operations. Emphasis on advanced cutting operations of the lathe and milling machines, including the use of special tooling, bench assembly, and materials identification.

Addition Page 212

Add "Prerequisite: A grade of C or better in MCHN 1329" to MCHN 2305

- MCHN 2305** **MILLWRIGHT III (2-4) CREDIT 3**
Prerequisite: A grade of C or better in MCHN 1329
 An introduction to bearings and seals. Identification of common bearings and seals. Emphasis on design and installation of seals and bearings.

Add "Prerequisite: A grade of C or better in MCHN 2305" to MCHN 2307

- MCHN 2307** **MILLWRIGHT IV (2-4) CREDIT 3**
Prerequisite: A grade of C or better in MCHN 2305
 A study in the recognition and application of pumps. This course will focus on troubleshooting, repair, and installation of pumps.

Revision Page 226

Change MUEN 1122 to MUEN 1125

- MUEN 1125** **CONCERT ORCHESTRA (0-3) CREDIT 1**
Prerequisite: Permission of department chair.
 Study of symphonic repertoire, from Baroque to Contemporary, through participation in instrumental performances.

Addition Page 231

Add "Prerequisite: A grade of C or better in HYDR 1345" to PFPB 2308

- PFPB 2308 PIPING STANDARDS & MATERIALS (3-0) CREDIT 3**
Prerequisite: A grade of C or better in HYDR 1345
Identification, description, and application of piping standards and specifications. Includes identification and use of various metallic and non-metallic piping materials, identification and installation of valves, and material take-offs.

Addition Page 234

Add PHED 2146 Taping and Bandaging to the course descriptions

- PHED 2156 TAPING AND BANDAGING (0-1) CREDIT 1**
This course provides the fundamental taping and bandaging techniques used in the prevention and care of athletic related injuries.

Revision Page 235

Add PHYS 1303, PHYS 1403, and PHYS 1404

- PHYS 1303 STARS AND GALAXIES (3-0) CREDIT 3**
Prerequisite: TSI complete in Reading and Math.
Study of stars, galaxies, and the universe outside our solar system. This course does not include a laboratory.
- PHYS 1403 STARS AND GALAXIES (3-3) CREDIT 4**
Prerequisite: TSI complete in Reading and Math.
Study of stars, galaxies, and the universe outside our solar system. This course includes a laboratory.
- PHYS 1404 SOLAR SYSTEM (3-3) CREDIT 4**
Prerequisite: TSI complete in Reading and Math.
Study of the sun and its solar system, including its origin. This course includes a laboratory.

Revision Page 240

Change PTHA 2336 PRACTICUM II – PHYSICAL THERAPIST ASSISTANT (0-0-40) CREDIT 3 to PTHA **2366** PRACTICUM II – PHYSICAL THERAPIST ASSISTANT (0-0-**30**) CREDIT 3

PTHA 2366 PRACTICUM II – PHYSICAL THERAPIST ASSISTANT (0-0-30) CREDIT 3
Prerequisites: Admission to the PTA Program

(Offered only in spring semester)

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course provides the fourth semester Physical Therapist Assistant (PTA) student a supervised application of previously learned techniques and skills in the rehabilitation of patients in selected clinical facilities affiliated with the college. The focus is on safe, legal, ethical and effective use of physical therapy interventions. This course also fosters the development of communication skills, interpersonal relationships and professionalism required for the healthcare field. Supervision of the student at the entry level is provided by the staff of the affiliating institutions and is coordinated by the college faculty.