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A PROPOSAL FOR

Emergency Medical Specialist

beginning fall of 2012



LAKE AREA
TECHNICAL INSTITUTE

www.lakeareatech.edu

LAKE AREA TECHNICAL INSTITUTE (LATI)
Emergency Medical Specialist Option

Executive Summary

Lake Area Technical Institute requests approval to add an Emergency Medical Specialist option for 2nd year Medical/Fire Rescue students. The option will be 9 months in length, resulting in an AAS degree. Graduates will be nationally certified Paramedics with additional training in Medical Coding, Insurance/Payment, and Computerized Medical Office Procedures. These skills will allow students to provide services beyond direct patient care to include coding and billing of those services to insurance or private pay situations.

LATI is an excellent fit for this new option as we already have very strong Medical/Fire Rescue and Medical Assistant programs. Both of these programs have resources which could be utilized by the Emergency Medical Specialist option, thus no additional costs will be required for this option.

IDENTIFICATION AND DESCRIPTION OF THE OPTION

The Emergency Medical Specialist option is designed for students interested in a career in the emergency medical field with additional opportunities in clinical healthcare settings. This option will prepare individuals to provide services beyond direct patient care to include coding and billing of those services to insurance or private pay situations. Students will be trained in CPT Medical Coding, Computerized Medical Office Procedures, Electronic Health Records and Patient-to-Payment/Insurance procedures. Upon successful completion of this option students will be eligible to take the National Registry Certification Exam.

OBJECTIVES AND PURPOSE OF THE OPTION

The primary objective of the Emergency Medical Specialist option would be to graduate students with the necessary skills to be employed in the Emergency and Medical Healthcare settings.

The option will articulate appropriate high school credits, whenever possible, however high school articulation will be limited due to the specialized nature and detail of the Emergency Medical Specialist curriculum. LATI will explore possible articulation agreements with the Board of Regents once the option is started.

Objectives will include the following: A graduate of this option should be able to:

- Prepare certified paramedics to provide high quality medical care and services in communities throughout the region.
- Provide students with the skills, knowledge, and ability to advance in the profession.
- Demonstrate safe, ethical, and legal practice.
- Identify concepts related to the health care system including multidisciplinary team approach, quality care, and the role of other health care providers, health care facilities, issues and problems.
- Interact with patients, victims, families, and co-workers in order to support them during times of crisis.
- Recognize the symbols used in the CPT manual.
- Analyze the differences among new, established, inpatient, and outpatient.
- Explain the levels of E/M service.
- Identify critical elements of Documentation Guidelines.
- Distinguish between professional and facility services.
- Assign E/M codes to services and procedures.
- List the major features of Level II National Codes.
- Compare fee-for-service and managed care health plans, and describe three types of managed care approaches.
- Describe the information required on an insurance claim.
- Identify the core functions of an electronic health record program.
- Discuss how the HIPPA Privacy Rule and Security Rule protect patient health information.
- Describe the role of claims in the billing cycle.
- Summarize the importance of a financial policy in a medical office.
- Identify the laws that regulate collections from patients.
- Discuss ten primary responsibilities of a medical insurance specialist.
- Discuss the importance of medical record documentation in the billing and payment process.
- Identify two ways Medicaid programs vary from state to state.
- List the primary kinds of Medicaid benefits determined by federal law and give examples of additional benefits states may authorize.
- Discuss what worker's compensation insurance covers, and tell which federal and state agencies administer the program.

- List the five types of compensation that employees may receive from work related illnesses and injuries.
- Discuss the purpose of disability compensation.
- Name the six major federal disability programs, and describe who is eligible for program benefits.
- Compare inpatient and outpatient hospital services.
- List the major steps relating to hospital claims processing.
- Describe the procedure codes used in hospital coding.
- Describe the methods of entering information in an Electronic Health Records program.
- Understand the concept of an electronic chart.
- Understand the patient's chart screen and icons.

METHODS OF ATTAINING THE OBJECTIVES OF THE OPTION

The curriculum incorporates a variety of instructional methods including use of the Lake Area Tech Innovation Center's resources to enhance instructional materials with virtual instruction, streaming video, etc. Additionally, the option accesses the latest medical facilities and technology.

The Emergency Medical Specialist option works closely with its advisory board composed of representatives from the various Emergency and Clinical Medical providers.

The advisory board provides input to assist with further curriculum development and to form partnerships to assist LATI with innovative instruction and cost-sharing.

DESCRIPTION OF THE NEEDS BASED ON LABOR MARKET DEMANDS IN THE UNITED STATES AND SOUTH DAKOTA

See Appendix B

POPULATION TO BE SERVED BY THE OPTION

The option will be available to all interested individuals who successfully meet the LATI admission criteria established. The option will be full-time. All applicants must be high school graduates and take an admission test to establish reading and math abilities. No restriction will be made regarding race, creed, gender or age. The option will draw students from South Dakota primarily. The opportunities for employment will be primarily in northeastern South Dakota.

PROJECTED THREE YEAR BUDGET

The program will be located on the LATI campus, sharing lab space with Medical/Fire Rescue and Medical Assisting. Extensive cooperation and synergism is anticipated between the Medical/Fire Rescue and Medical Assisting. LATI has the equipment needed for this option and no equipment purchases will be needed. The option can accommodate 20 students. No additional staff will be required unless the option increases in size.

OPTION COMPETENCIES AND ENTRY AND EXIT POINTS OF SUBOCCUPATIONS

Entry Points: Fall-2013

Exit Point: After completion of all coursework.

Job Titles: See Appendix B

Statement of Non-duplication

This option is not available at any college or Technical Institute in South Dakota.

Curriculum Design

See Appendix A for Curriculum Outlines.

Survey/Wage Factor

See Appendix B

SUGGESTED CIP CODE

Detail for CIP Code 51.0904

Title: Emergency Medical Technology/Technician (EMT Paramedic).

Definition: A program that prepares individuals, under the remote supervision of physicians, to recognize, assess, and manage medical emergencies in pre-hospital settings and to supervise Ambulance personnel. Includes instruction in basic, intermediate, and advanced EMT procedures; emergency surgical procedures; medical triage; rescue operations; crisis scene management and personnel supervision; equipment operation and maintenance; patient stabilization, monitoring, and care; drug administration; identification and preliminary diagnosis of diseases and injuries; communication and computer operations; basic anatomy, physiology, pathology, and toxicology; and professional standards and regulations. *See also: 51.0810) Emergency Care Attendant (EMT Ambulance).*

APPENDIX

- A. Curriculum outlines.
- B. Job titles and survey/wage factors.
- C. Letters of Support.

Appendix A

Med/Fire Rescue Emergency Medical Specialist



Semester Outline
2012 – 2013 Revised: 5/12

20 Months ■ Credits Required for Graduation: 69 ■ Associate of Applied Science (A.A.S.) Degree

First Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
EMT 100	Emergency Medical Technician (EMT Basic)	140	5
EMT 110	Physiology	64	4
EMT 115	Pharmacology	28	1
ANAT 142	Anatomy	48	3
CPR 110	CPR/AED for the Professional Rescuer	28	1
CSC 100	Computer Concepts	21	1
ENGL 203	Reading Technical Manuals	28	1
MA 115	Medical Terminology	42	1.5
Total		399	17.5

First Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
MFR 105	Airway/IV Management	112	4
MFR 110	Trauma Assessment and Treatment	84	3
MFR 120	Clinical Observation I	60	1
MFR 125	Medical Assessment and Treatment	112	4
MFR 135	Certifications	56	2
CSS 100	Career Search Strategies	14	.5
ENGL 202	Writing for the Real World	48	3
Total		486	17.5

Summer Session

Course Number	Course Title	Clock Hours	Credits
MFR 100	Patient Assessment	84	3

MFR 130	Clinical Observation II	260	5
	Total	344	8

Med/Fire Rescue ■ Emergency Medical Specialist

Second Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
MFR 200	Med/Fire Rescue	28	1
MFR 215	Clinical Observation III	240	4
MFR 235	Paramedic Preparation	56	2
MA 206	Computerized Medical Office Procedures	84	3
MA 212	Patient-to-Payment/ Insurance Procedures	56	2
Total		464	12

Second Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
MA 167	CPT Medical Coding	84	3
MA 201	Electronic Health Records	56	2
<ul style="list-style-type: none"> • Selected Behavioral Science Course PSYC 100 – Psychology of Human Relations PSYC 101 – General Psychology * 		48	3
<ul style="list-style-type: none"> • Selected Mathematics Course MATH 100 – Applied General Math MATH 101 – Intermediate Algebra MATH 102 – College Algebra * 		48	3
<ul style="list-style-type: none"> • Selected Social Science Course ECON 105 – Leadership in the Global Workplace ECON 201 – Principles of Microeconomics I * ECON 202 – Principles of Macroeconomics II * SOC 100 – Introduction to Sociology * 		48	3
Total		284	14

Note: SPSH 100 – Spanish for Healthcare Workers (.5 – 3 credits) is an elective course and highly recommended.

• Students will select a course in each of the areas listed to meet general education requirements. Courses marked with an asterisk can be transferred directly to the university system under the terms of articulation agreements. Students should speak with an advisor before selecting transferable courses.

APPENDIX B

South Dakota Employment Projections 2008 - 2018 and Wage Data for Select Emergency Medical Technicians and Paramedics Occupations												
SOC* Code	Occupational Title	2008 Base Number of Jobs	2018 Projected Number of Jobs	Actual Change	Percent Change	Average Annual Demand for Workers	Average Wage	Percentile Wages				
								10th	25th	50th	75th	90th
29-2041	Emergency Medical Technicians and Paramedics	815	940	125	15.3%	29	\$14.31	\$10.24	\$11.37	\$13.85	\$16.96	\$19.59

*SOC - Standard Occupational Classification, 2000
[Click here for descriptions of SOC occupations by code \(2000 version\).](#)

Projected Employment Notes:

Data is preliminary and subject to revision. Data for occupations with less than 20 jobs in 2008 not included. Number of jobs data for 2008 and 2018 rounded to nearest five.

Demand data is the summation of job openings estimated due to projected employment growth and job openings projected to be created due to replacement need of current workers. Replacement need is estimated by multiplying occupational employment estimates by national replacement rates supplied by the U.S. Bureau of Labor Statistics (BLS). These rates estimate the number of job openings, by occupation, which will be attributed to a worker permanently leaving an occupation (e.g. retirement, death, exits the workforce, etc.). Average annual demand data are calculated by dividing by ten, the number of years in the projection period. For more information, see http://dlr.sd.gov/lmic/projections_methodology.aspx.

Wages Notes:

Wages do not include the value of benefits paid to workers.

Number of Workers: represents an estimate of the total wage and salary workers in an occupation across all industries. For certain occupations, the number of Average Wage: represents the arithmetic mean of the wage data collected, calculated by dividing the estimated total wages for an occupation by the number of Median Wage: represents the positional central tendency of a dataset where 50 percent of the wages fall below this wage and 50 percent of the wages fall Percentile Wage: represents the percentage of an occupation's workers that earn less than or equal to that wage:

10th Percentile: 10% earn less than or equal to this amount; 90% earn more

25th Percentile: 25% earn less than or equal to this amount; 75% earn more

50th Percentile: 50% earn less than or equal to this amount; 50% earn more (median wage)

75th Percentile: 75% earn less than or equal to this amount; 25% earn more

90th Percentile: 90% earn less than or equal to this amount; 10% earn more

For more technical notes on wage data, please visit http://dlr.sd.gov/lmic/technicalnotes_wages.aspx.

Source: Labor Market Information Center, South Dakota Department of Labor and Regulation, June 2012.

United States Employment Projections 2010 - 2020 and Wage Data for Emergency Medical Technicians and Paramedics Occupations											
SOC* Code	Occupational Title	2010 Base Number of Jobs	2020 Projected Number of Jobs	Percent Change	Average Annual Demand for Workers	2010 Average Wage	2010 Percentile Wages				
							10th	25th	50th	75th	90th
29-2041	Emergency Medical Technicians and Paramedics	226,500	301,900	33.3%	120,800	\$16.36	\$9.56	\$11.74	\$14.77	\$19.44	\$25.50

*SOC - Standard Occupational Classification, 2000

[Click here for descriptions of SOC occupations by code \(2000 version\).](#)

Projected Employment Notes:

Data is preliminary and subject to revision. Data for occupations with less than 20 jobs in 2010 not included. Number of jobs data for 2010 and 2020 rounded to nearest five.

Demand data is the summation of job openings estimated due to projected employment growth and job openings projected to be created due to replacement need of current workers. Replacement need is estimated by multiplying occupational employment estimates by national replacement rates supplied by the U.S. Bureau of Labor Statistics (BLS). These rates estimate the number of job openings, by occupation, which will be attributed to a worker permanently leaving an occupation (e.g. retirement, death, exits the workforce, etc.). Average annual demand data are calculated by dividing by ten, the number of years in the projection period. For more information, see http://dlr.sd.gov/lmic/projections_methodology.aspx.

Wages Notes:

Number of Workers: represents an estimate of the total wage and salary workers in an occupation across all industries. For certain occupations, the number of workers statistic may not be available because of disclosure concerns or reliability issues.

Average Wage: represents the arithmetic mean of the wage data collected, calculated by dividing the estimated total wages for an occupation by the number of workers in that occupation. Also referred to as the mean wage.

Median Wage: represents the positional central tendency of a dataset where 50 percent of the wages fall below this wage and 50 percent of the wages fall above this wage. This is also commonly referred to as the 50th percentile wage.

Percentile Wage: represents the percentage of an occupation's workers that earn less than or equal to that wage:

10th Percentile: 10% earn less than or equal to this amount; 90% earn more

25th Percentile: 25% earn less than or equal to this amount; 75% earn more

50th Percentile: 50% earn less than or equal to this amount; 50% earn more (median wage)

75th Percentile: 75% earn less than or equal to this amount; 25% earn more

90th Percentile: 90% earn less than or equal to this amount; 10% earn more

For more technical notes on wage data, please visit http://dlr.sd.gov/lmic/technicalnotes_wages.aspx.

Source: Labor Market Information Center, South Dakota Department of Labor and Regulation, June 2012. United States Department of Labor, Bureau of Labor Statistics, June 2012.

APPENDIX C

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June 1, 2012

South Dakota Board of Education,

As a member of the advisory board for Lake Area Tech's Med/Fire Rescue Program I am in favor of their pursuit to ascertain approval for an Associate Degree from the South Dakota Board of Education. I understand this additional component will take place during the second year of the Med/Fire Rescue Program. After successfully completing the additional requirements, participants would be eligible for an Associate's Degree as an Emergency Medical Specialist. I have been advised that the proposed addition adds approximately nine months to the length of the education already offered in their paramedic program.

The Med/Fire Rescue Program would be able to produce Emergency Medical Specialist to ensuring Eastern South Dakota and parts of the Midwest Region have trained advanced life support personnel serving their communities. This proposal is another example of Lake Area Tech responding to regional needs of workforce development and challenges experienced by several EMS agencies today.

I foresee the addition of the Associates Degree to the Med/Fire Rescue Program catering to the needs of students seeking a college driven degree in a specialty field with increasing industry needs and demands. I thank you for your careful consideration on their request to build an already wonderful program.

Respectfully,

A handwritten signature in black ink, appearing to read "Travis Spier".

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Our Mission:
Dedicated to the work of
health and healing