



Missouri Department of Higher Education

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NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): State Fair Community College

Program Title: Diagnostic Medical Sonography (DMS)

Degree/Certificate: Associate of Applied Science

Options: AAS Diagnostic Medical Sonography (DMS)

Delivery Site(s): State Fair Community College, Sedalia Campus

CIP Classification: 51.0910 (Please provide a CIP code)

Implementation Date: Fall 2012

Cooperative Partners: OT

AUTHORIZATION:

Dr. Brent Bates, Vice President of Educational Services		2/7/2012
_____ Name/Title of Institutional Officer	_____ Signature	_____ Date

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_____ Person to Contact for More Information	_____ Telephone	



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STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	6	12	12	12	12
Part Time	0	0	0	0	0
Total	6	12	12	12	12

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Form SE - Student Enrollment Projections

Enrollment will not be capped in the future.

Local, Regional and/or state demand for this program:

Sonography - will see an increase of about 18% through 2018, faster than the average for all occupations. Echocardiography and Vascular technologists will see an increase by about 24% through 2018, much faster than the average for all occupations. Demand will stem from the prevalence of heart disease and the aging population, because older people have a higher incidence of heart disease and other complications of the heart and vascular system. Employment for vascular technologist and echocardiographers will grow as advances in vascular technology and sonography reduce the need for more costly and invasive procedures. Job prospects will be best for those with multiple professional credentials, trained to perform a wide range of procedures.

(Source: <http://www.bls.gov/oes/current/oes292032.htm>)



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PROGRAM STRUCTURE

A. Total credits required for graduation: 87

B. Residency requirements, if any: College tuition and fees are based on residency status.

C. General education: Total credits: 23

Courses (specific courses OR distribution area and credits):

College Algebra 3cr. Human Physiology w/Lab 4cr.
Physics 3cr. History/Am. Govt 3cr.
English Comp I 3cr.
Medical Terminology 3cr.
Human Anatomy w/Lab 4cr.

D. Major requirements: Total credits: 64

See attachment please
cr. cr. cr. cr. cr. cr. cr. cr.

E. Free elective credits: 0 (Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

None

G. Any unique features such as interdepartmental cooperation:

None

DMS Course Number	Semester 1	Credit Hours
101	Patient Care and Ethics and Law	2
110	Ultrasound Physics and Instrumentation I	3
111	Scanning Techniques I (Lab)	2
130	General Ultrasound I	1
140	OB/GYN Ultrasound I	1
150 or 160	Vascular Ultrasound I or Cardiac U/S I	1
120	Ultrasound Clinical Education I	3.5
		13.5
	Semester 2	
112	Ultrasound Physics and Instrumentation II	2
113	Scanning Techniques II (Lab)	1
132	General Ultrasound II	1
142	OB/GYN Ultrasound II	1
152 or 162	Vascular or Cardiac Ultrasound II	1
121	Ultrasound Clinical Education II	7
		13
	Semester 3 - Summer semester	
122	Ultrasound Clinical Education III	3
123	Ultrasound Clinical Education IV	3
		6
	Semester 4	
114	Ultrasound Physics and Instrumentation III	0
134	General Ultrasound III	1
144	OB/GYN Ultrasound III	1
154 or 164	Vascular or Cardiac Ultrasound III	1
124	Ultrasound Clinical Education IV	9
		12
	Semester 5	
116	Ultrasound Physics and Instrumentation IV	0
170	Ultrasound Review and Workforce Readiness	3
125	Ultrasound Clinical Education V	9
		12
	Semester 6	
126	Ultrasound Clinical Education VI	4.5
172	Registry Review - online	3
		7.5

Total Ultrasound Hours 64



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PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name State Fair Community College
Program Name Diagnostic Medical Sonography
Date February 2012

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.

Applicants will be required to meet State Fair Community College Admission Procedures: Submit a SFCC application for admission form with application fee, Submit Official High School Transcripts or High School Equivalency Certificate (GED), Submit Official College Transcripts from all colleges attended. For all college courses completed as dual credit, transcripts must be requested from each college awarding credit (as well as the High School Transcripts). Take a placement Test: ACT, ASSET, or COMPASS. All development courses must be taken and passed with a "C" or higher, based upon assessment test scores. Applicants will have an overall GPA of 3.0 or higher. The following prerequisite courses must be passed with a "B" or higher: College Algebra, General Physics or Radiographic Physics, English Comp. I, Medical Terminology I, Human Anatomy with lab, Human Physiology with lab. Two general education courses must be completed with a "B" or higher to meet AAS requirements. A Sonography application packet must be completed and submitted by all applicants. The application packet will include but is not limited to: Application Form, Observation time required and paperwork completed, References. All applicants with complete application packets who meet minimum requirements will be invited to a workshop which will include academic/critical thinking assessment, oral and written requirements. If selected for the program students must complete drug testing, background checks, and provide documentation of immunizations.

- Characteristics of a specific population to be served, if applicable.
[Click here to enter text.](#)

Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.
The program director must; 1) be an appointed faculty member or institutional equivalent 2) possess a minimum of a Bachelor's Degree Sonography 3) have course

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work in instructional methodologies, evaluation and assessment 4) possess the appropriate credential(s) specific to one or more of the concentration(s) offered. 5) have proficiency in curriculum development; 6) possess a minimum of two years of full-time experience as a registered sonographer in the professional sonography field. Full-time is defined as 35 hours per week. Concentration coordinator(s) must: 1) be an appointed faculty member or institutional equivalent; 2) possess an academic degree at least equivalent to the degree that is offered in the concentration(s) that s/he is designated to coordinate; 3) possess the appropriate credential(s) specific to the concentration(s) that s/he is designated to coordinate; 4) have proficiency in curriculum development; 5) possess a minimum of two years of full time experience as a registered sonographer in the professional sonography field. Full-time is defined as 35 hours per week. The clinical coordinator(s) must possess, at a minimum, the following: 1) proficiency in teaching methodology, supervision, instruction, evaluation, and guidance; 2) appropriate credential(s) specific to the concentrations offered; 3) the equivalent of two years full-time professional experience as a general sonographer, cardiac sonographer, pediatric cardiac sonographer and/or vascular sonographer. Full-time is defined as 35 hours per week; and 4) an academic degree no lower than an associate's degree and at least equal to that for which the graduates are being prepared. The following credentials from ARDMS, ARRT, and CCI are accepted for clinical instructors in the specified area: Abdomen: RDMS (AB), RT (S); OB/Gyn: RDMS (OB), RT (S); Breast: RDMS (AB), RDMS (BR), RT (S); Neurosonology: RDMS (AB), RT (S), RDMS (NE); Adult Echocardiography: RDCS (AE), RCS; Pediatric Echocardiography: RDCS (AE), RDCS (PE), RCS; Fetal Echocardiography: RDMS (OB), RT (S), RDCS (PE), RDCS (FE), RCS; Vascular: RVT, RVS. The medical advisor must be a United States licensed physician, Board certified in a medical specialty related to at least one of the cardiac, vascular or general learning concentrations as applicable to the program's design.

- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here. Full time faculty will teach greater than 40% of the credit hours.
- Expectations for professional activities, special student contact, teaching/learning innovation. Students and instructors will attend a professional development conference annually. The number of students assigned to the clinical affiliate/clinical education center will be determined by a student/clinical staff ratio not greater than one-to-one, and a student/work station ratio of not greater than one-to-one. Students will rotate through a variety of care settings in which sonographic and/or other diagnostic vascular procedures are performed on in-patients and outpatients. These settings may include the following: Ambulatory care facilities, Emergency/trauma, Intensive/critical/coronary care, Surgery, Angiography/cardiac catheterization.

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Enrollment Projections

- Student FTE majoring in program by the end of five years.
12 full time students enrolled each year, six first year and six second year students, (after the first year).
- Percent of full time and part time enrollment by the end of five years.
Part time enrollment will not be an option for this degree.

Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.
Six graduates each year.
- Special skills specific to the program.
Diagnostic medical sonographers use special equipment to direct high frequency sound waves into areas of the patient's body. Sonographers operate the equipment, which collects reflected echoes and forms an image that may be videotaped, transmitted, or photographed for interpretation and diagnosis by a physician. Sonographers begin by explaining the procedure to the patient and recording any medical history that may be relevant to the condition being viewed. They then select appropriate equipment settings and direct the patient to move into positions that will provide the best view. To perform the exam, sonographers use a transducer, which transmits sound waves in a cone-shaped or rectangle-shaped beam. Although techniques vary by the area being examined, sonographers usually spread a special gel on the skin to aid the transmission of sound waves. Viewing the screen during the scan, sonographers look for subtle visual cues that contrast healthy areas with unhealthy ones. They decide whether the images are satisfactory for diagnostic purposes and select which ones to store and show to the physician. Sonographers take measurements, calculate values, and analyze the results in preliminary findings for the physicians. In addition to working directly with patients, diagnostic medical sonographers keep patient records and adjust and maintain equipment. They also may prepare work schedules, evaluate equipment purchases, or manage a sonography or diagnostic imaging department.
- Proportion of students who will achieve licensing, certification, or registration.
A 60% overall take and pass rate to earn a credential within one year of graduation. At some point during the three, five, or ten year accreditation cycle the program will demonstrate that some graduates have been successful in obtaining all of the credentials the curriculum is designed to teach.
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education

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and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.

A 60% overall take and pass rate to earn a credential within one year of graduation through RDMS or ARRT. At some point during the three, five, or ten year accreditation cycle the program will demonstrate that some graduates have been successful in obtaining all of the credentials the curriculum is designed to teach.

- Placement rates in related fields, in other fields, unemployed.
At least 75% of graduates will be employed as sonographers, continuing their education, or in the military within six months of graduation.
- Transfer rates, continuous study.
Please see above.

Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide reasons. Accreditation from Joint Review Committee on Education in Diagnostic Medical Sonography (JRCDMS) and Commission on Accreditation of Allied Health Education Programs (CAAHEP) will be filed when the first students are accepted into the program.

Alumni and Employer Survey

- Expected satisfaction rates for alumni, including timing and method of surveys. Within one year of graduation Graduate Surveys will have a 50% return rate with a composite score of three or greater on a five point rating scale.
- Expected satisfaction rates for employers, including timing and method of surveys. Within one year of graduation Employer Surveys will have a 50% return rate with a composite score of three or greater on a five point rating scale.

Institutional Characteristics:

Training competent sonographers to discover disease processes using sound waves allows SFCC students to develop life-long skills that will prepare them to enter and progress within the ever changing field of healthcare.