

Planning and Evaluation Tracking

College Year: 2006-2007

Division of: <u>Allied Health</u> Person Responsible: <u>Bill Crawford</u>
Department of: <u>Medical Laboratory Technology</u>
Person Responsible: <u>Jan Martin</u>

Purpose Statement: "The Medical Laboratory Technology program at Amarillo College is dedicated to providing students with the academic knowledge, the technical training, and the professional skills to enable them to serve as vital members of the healthcare team, within the framework of the Medical Laboratory Technician, in order to enhance the quality of life for individuals in and beyond our service area."

Goal Statements

 Students will be equipped with the cognitive knowledge and psychomotor skills for analysis and clinical decision-making, information management, regulatory compliance, education, and quality assurance/improvement wherever laboratory testing is researched, developed or performed.

Objectives/Outcomes

(including assessment tools and standards)

- A. 100% of graduating Sophomore students will meet or exceed a score of 70% on at least one of three final, comprehensive capstone exams, administered during the final semester of the Medical Laboratory Technology program. The tests are composed of questions covering all of the major and minor disciplines in clinical laboratory science. The questions utilize three taxonomic levels (recall, interpretation, and problem solving), and they are derived from registry-type questions from various nationally recognized
- B. 100% of the students will achieve a score of 70% or better on the Task List student evaluation instruments in all Practicum I and II rotations, during the Sophomore year of the Medical Laboratory Technology program. This instrument provides an evaluation of the essential cognitive and psychomotor aspects of Medical Laboratory Technology in a professional, medical setting.

Medical Lab registry review texts.

Results

A. 2006 Class Average = 80.339% Class Range = 78.0%-82.5% (Please see chart/table 1A)

Use of Results

(including improvements and revisions)

A. 100% of the students achieved a score well above the target score of 70%. The MLT faculty will continue to re-evaluate test questions to incorporate those related to new and emerging technologies in Clinical Laboratory Science.

- B. Students in the graduating class of 2006 earned Task List scores from 89.3% to 100.0%, with an overall average of 95.47% (Please see chart/table 1B)
 - B. The results over the past several years continue to be well above the target score of 70%. The MLT faculty will continue to incorporate current and new technologies into laboratory courses to well prepare student for Practicum experiences.

- 2. Students will be able to demonstrate graduate/entry level technician knowledge and performance of routine and special clinical laboratory tests as the primary analyst, making specimen oriented decisions based on predetermined criteria, including a working knowledge of critical values.
- A. 100% of all Medical Laboratory Technology Program graduates will have achieved a score of "Pass" on a Pass/Fail basis, indicating cognitive and psychomotor competency, for all areas indicated on the Amarillo College Medical Laboratory Technology Competency Profile. The profile is updated by program officials and adjunct clinical faculty at the conclusion of each semester of the Medical Laboratory Technology program, and completed prior to the last semester of the program. The profile includes basic tasks and psychomotor skills required of the entry level Medical Laboratory Technician.
- A. 2006 Pass/Fail Rate = 100% Pass (Please see chart/table 2A)
- A. The Pass/Fail rate for the Medical Laboratory Technology Student Competency continues at a level of 100% passing. The faculty will continue to monitor student competency in all areas of the clinical laboratory, and also work with clinical/adjunct faculty to correct any deficiencies that arise.

- B. 100% of all completed and returned Employer Satisfaction Surveys will rate employees, who are graduates of the Amarillo College Medical Laboratory Technology Program, with an average score of at 3.5 on a Likert scale of 1-5. The surveys are mailed out to employers approximately 9 months to one year post graduation. The surveys include questions that encompass all three taxonomic domains. Specifically, test performance and professional skills and attitudes are addressed and evaluated.
- B. 2005 Employer Satisfaction Survey Results = 4.40 on a Likert scale of 1-5 (Please see chart/table 2B)
- B. The Employer Satisfaction Survey Results for the Medical Laboratory Technology graduates has consistently been at a level well above the 3.5 standard. The faculty will continue to monitor student performance in all areas of the clinical laboratory, and also work with clinical/adjunct faculty and prospective employers to correct any deficiencies that arise in student performance prior to graduation from the program, and subsequent employment.

- Knowledge and communication skills that extend to collaborative, consultative, and educational interactions with laboratory professionals, other healthcare professionals, patients, and the general public.
- A. 90% of the students will prepare an informational visual presentation pertaining to the clinical laboratory profession. The presentation is utilized to present information regarding different aspects of laboratory medicine during National Medical Laboratory Week, and is viewed by students and faculty in the Allied Health Division, as well as the general
- A. 2006 participation = 100.0% (Please see chart/table 3A)
- A. This is a requirement for the students in the Medical Laboratory Technology program, however we feel that it is an excellent opportunity for students to develop additional knowledge and better public relations skills. In addition, it provides an occasion for students to promote their chosen profession to other

public. The purpose of the presentation is to augment the student's cognitive understanding of at least one aspect of laboratory medicine, to educate other medical professionals as well as the general public, and to promote the laboratory profession. All students enrolled in the Medical Laboratory Technology program are strongly encouraged to participate.

standard of 90%. The faculty of the Medical Laboratory
Technology program have revised requirements and created incentives for student participation.

B. 206 Research Presentations =

(Please see chart/table 3B)

95.7%

B. 100% of the Sophomore students will prepare and present an in-depth advanced research project, and achieve an average score of 90%, as evaluated by their instructor and their peers. The project will include a research paper prepared according to specific guidelines, set forth by program officials. The students will present their research to the Med Lab faculty and to their peers during the last semester of the Medical Laboratory Technology program. The presentation must include audio-visual aides and must demonstrate sufficient depth of knowledge as would be expected of students at this level of education. Evaluation of the presentation based on appropriate selection of subject, depth of subject matter, structure of project, communication/presentation techniques, and audio/visual aides.

participation.

B. The average student score in 2006 was slightly greater than the average student score in 2005. The faculty will continue to

health professional, as well as the general public. The 100% rate of

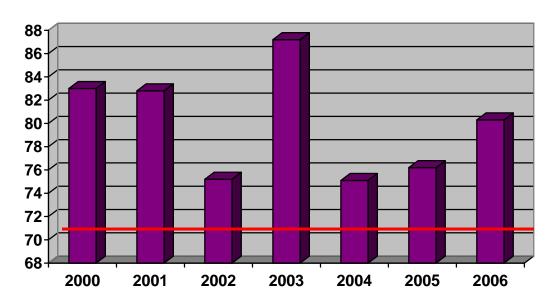
participation is well above the

2006 was slightly greater than the average student score in 2005. The faculty will continue t put greater emphasis on this project and encourage students to augment their presentation skills prior to actual delivery of their research presentation.

- 4. Demonstrated capacity for calm and reasoned judgment, taking responsibility for one's own actions, and a strong commitment to patient welfare. Ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community at large.
- A. 100% of the students will achieve a score of 70% or better on the Student Professional Evaluation instruments in all Practicum I and II rotations, during the Sophomore year of the Medical Laboratory Technology program. This instrument provides an evaluation of the affective aspects of Medical Laboratory Technology in a professional medical setting including professionalism (attire, demeanor and conduct), dependability, ability to reason and learn, initiative, attitude, and adaptability.
- A. Students in the graduating class of 2006 earned Student Professional scores from 85.3% to 100.0%, with an overall average of 93.8% (Please see chart/table 4A)
- A. The results are statistically similar to those of 2005, with a difference of -0.2% The faculty will continue to emphasize the essential qualities of professionalism in the medical laboratory setting.

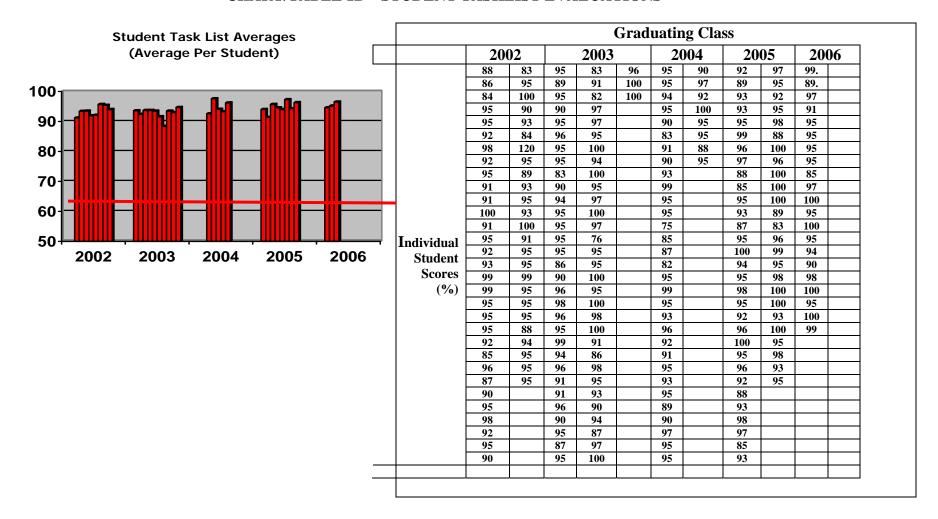
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CHART/TABLE 1A – COMPREHENSIVE CAPSTONE EXAMINATIONS

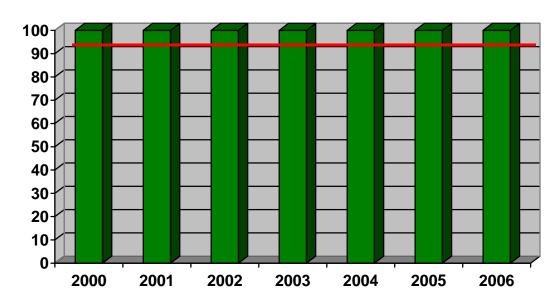


	2000	2001	2002	2003	2004	2005	2006
	89.5	84.0	70.0	94.0	70.0	70.0	82.5
	72.5	91.0	76.0	88.0	86.0	68.0	80.5
"Best of	91.5	91.5	82.0	78.0	73.5	82.5	78.0
"Best of	95.5	86.0	73.0	88.0	72.0	70.5	
Three''	89.0	74.5	74.0	90.0	74.0	74.5	
Individual		70.0	76.0	87.0		84.0	
Student Scores			72.0	86.0		77.5	
(%)			80.0	84.0		82.5	
				86.0			
				90.0			
Class Average	83.0	82.8	75.2	87.1	75.1	76.2	80.3

CHART/TABLE 1B – STUDENT TASKLIST EVALUATIONS

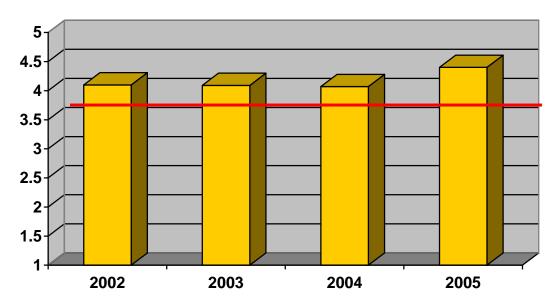


CHART/TABLE 2A – STUDENT COMPETENCY PROFILES



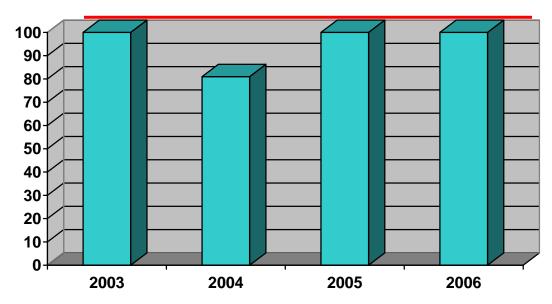
	2000	2001	2002	2003	2004	2005	2006
	Pass						
	Pass	Pass	Pass	Pass	Pass	Pass	Pass Pass Pass Pass Pass Pass Pass Pass
PassPassPassPassPassPassPassPassIndividualPassPassPassPass	Pass						
	Pass						
Individual	Pass	Pass	Pass	Pass	Pass	Pass	
Student		Pass	Pass	Pass		Pass	
Pass/Fail			Pass	Pass		Pass	
			Pass	Pass		Pass	
				Pass			
				Pass			
				-			
Class Average	100% Pass						

CHART/TABLE 2B – EMPLOYER SATISFACTION SURVEYS



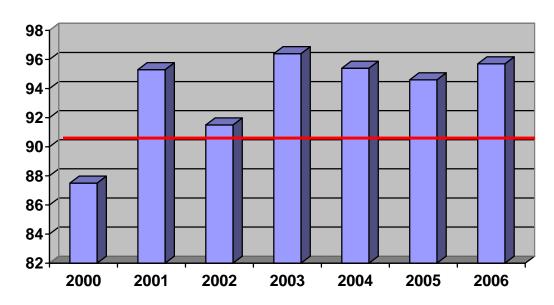
	2002	2003	2004	2005
Average Overall Score (Likert Scale 1-5)	4.10	4.09	4.07	4.40

CHART/TABLE 3A – NATIONAL MEDICAL LABORATORY WEEK PRESENTATIONS



	2003	2004	2005	2006
%Participation	16/16=100%	13/16=81%	12/12=100%	3/3=100%

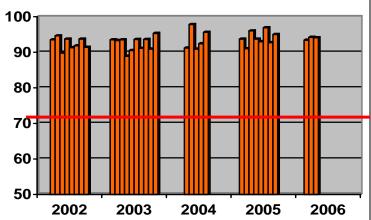
CHART/TABLE 3B – RESEARCH PRESENTATIONS



	2000	2001	2002	2003	2004	2005	2006
	87	99	95	97	95	85	75
	88	97	100	94	100	82	96
	75	98	87	94	90	98	96
	92	95	92	98	95	100	
Individual	94	90	90	98	98	95	
Student Scores	89	93	87	97		98	
(%)			87	100		99	
			94	97		100	
				94			
				95			
Class Average	87.5	95.3	91.5	96.4	95.4	94.6	95.7

CHART/TABLE 4A – STUDENT PROFESSIONAL EVALUATIONS

Student Professional Evaluation Averages (Average Per Student)



	Graduating Class										
	20	002	2003			2004		2005		2006	
	90.3	95.0	95.0	95.0	91.0	96.0	94.1	76.0	100	98.7	
	87.8	95.3	91.0	91.4	94.0	98.0	96.0	92.0	97.0	85.3	
	84.0	92.8	98.2	94.0	97.0	92.0	90.1	88.0	100	96.7	
	89.1	84.7	97.0	95.0	90.0	91.0	97.5	99.0	100	91.7	
	95.3	100	95.0	87.5	95.0	97.0	92.6	96.3		91.6	
	95.6	91.2	95.7	83.0	95.0	92.0	95.0	92.0		93.0	
	97.5	87.0	95.0	92.7	94.0	99.0	88.2	95.0		95.0	
	91.4	89.9	95.0	89.5	95.0	96.0	95.0	100		95.0	
	90.9	75.5	77.0	91.3	85.0	100		97.7		83.9	
	95.0	94.6	88.0	96.0	89.0	100		100		96.1	
	91.1	95.5	94.6	93.6	96.0	95.0		95.0		100	
	91.0	95.0	92.1	95.0	93.0	82.0		96.4		95	
	100	92.7	94.3	69.6	84.0	81.0		96.4		94.3	
Individual	95.0	100	95.0	88.8	85.0	96.0		99.0		95	
Student	92.7	91.0	91.0	89.0	99.0	99.0		71.0		91	
	93.5	95.0	87.0	88.0	93.0	95.0		95.0		91.3	
Scores	87.4	90.6	92.0	96.0	95.0	99.0		92.0		100	
(%)	90.6	99.3	97.5	95.6	99.0	97.0		93.0		100	
(,,)	85.1	93.9	98.0	95.0	95.0	98.0		95.0		95	
	95.3	95.0	94.0	90.4	97.0	93.0		94.0		90.5	
	95.9	96.1	95.7	93.0	96.0	100		96.0		91.3	
	95.0	88.5	94.3	90.0	97.0	93.0		93.9			
	92.5	89.5	93.8	95.0	92.0	98.0		91.0			
	84.7	95.0	96.4	95.0	98.0	91.0		87.3			
	92.1	95.0	84.3	96.0	85.0	92.0		95.7			
	90.3	95.6	89.9	95.0	88.0			95.1			
	83.2		92.9	93.0	99.0			94.0			
	93.5		86.0	88.1	98.0			90.0			
	92.8		95.0	96.0	91.0			92.1			
	93.8		91.0	91.7	87.0			83.0			
	95.0		94.0	95.0	95.0			97.5			