

Planning and Evaluation Tracking

College Year: 2005-2006

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 Medical Lab registry review texts.

Results

A. 2005 Class Average = 76.19% Class Range = 68.0%-84.0% (Please see chart/table 1A)

Use of Results

(including improvements and revisions)

A. One student received a score of 68.0% as her best score on one of the three capstone exams. The remaining seven students achieved scores ranging from 70.0% to 84.0% The student who received the failing score received an incomplete in the class and was given additional study materials, references and study guides. She was allowed to retake the exam once more, after an eight week period of intensive study, and passed with a score of 88%. The faculty believe that this student's failure to achieve a passing grade on one of the three exams was an isolated incident. After counseling the student, she admitted that she had not studied for any of the three capstone exams, due to circumstances in her life that seemed beyond her control. The faculty will continue to carefully monitor the progress of students in this class and strongly emphasize the importance of studying and continued learning during the review process to

| B. 100% of the students will achie score of 70% or better on the student evaluation instruments. Practicum I and II rotations, d Sophomore year of the Medica Laboratory Technology progra instrument provides an evalua the essential cognitive and psychomotor aspects of Medic Laboratory Technology in a professional medical setting. | Task List s in all luring the al m. This tion of |
|--|---|
| professional, medical setting. | |

- B. Students in the graduating class of 2005 earned Task List scores from 91.4% to 97.3%, with an overall average of 94.7% (Please see chart/table 1B)
- pass their certification exam(s)B. The results over the pastseveral years continues 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.

enable to pass the capstone exams, and after graduation, to

- 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. 2005 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)

- 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 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.
- and prospective employers to correct any deficiencies that arise in student performance prior to graduation from the program, and subsequent employment.

 A. 2005 participation = 100.0%

 (Please see chart/table 3A)

 A. This is a fairly new requirement for the students in the Medical
 - A. This is a fairly new 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 health professional, as well as the general public. The 81% rate of participation is well below the standard of 90%. The faculty of the Medical Laboratory Technology program have revised requirements and created incentives for student participation.

B. The Employer Satisfaction Survey

Laboratory Technology graduates

well above the 3.5 standard. The

has consistently been at a level

faculty will continue to monitor

student performance in all areas

of the clinical laboratory, and also

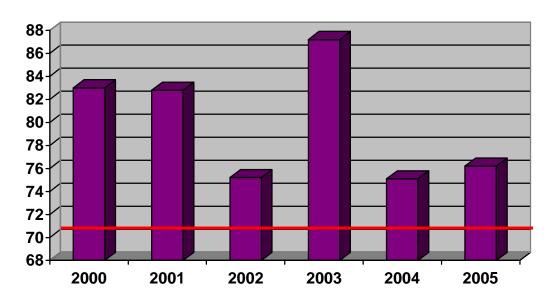
work with clinical/adjunct faculty

Results for the Medical

- 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.
- B. 2005 Research Presentations = 94.8% (Please see chart/table 3B)
- B. The average student score in 2005 was statistically similar to the average student score in 2004 with a difference of less than 1%. However, as there is a slight downward trend, the faculty will put greater emphasis on this project and encourage students to augment their presentation skills prior to actual delivery of their research presentation.

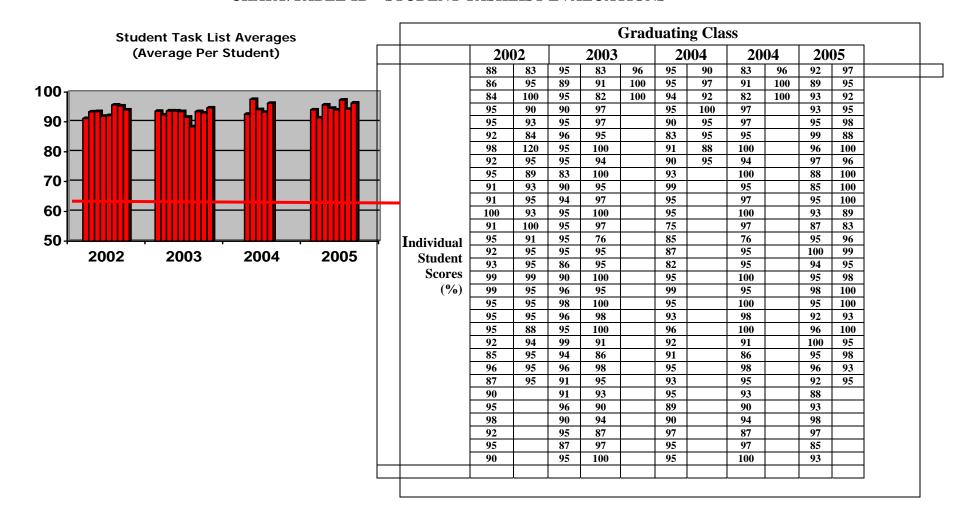
- 4. Demonstrated capacity for calm and reasoned judgment, taking responsibility for one's own actions, and a strong commitment to patient welfare. Ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community 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 2005 earned Student Professional scores from 91.0% to 96.9%, with an overall average of 94% (Please see chart/table 4A)
- A. The results over the past several years have shown a steady overall increase. The faculty will continue to emphasize the essential qualities of professionalism in the medical laboratory setting.

CHART/TABLE 1A – COMPREHENSIVE CAPSTONE EXAMINATIONS

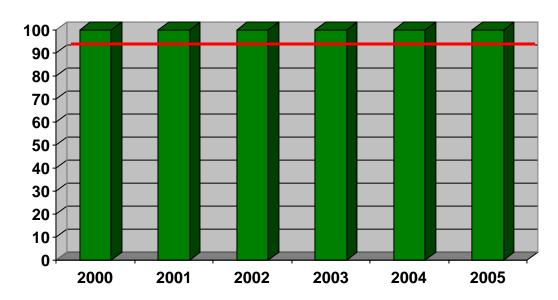


| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-----------------------|------|------|------|------|------|------|
| | 89.5 | 84.0 | 70.0 | 94.0 | 70.0 | 70.0 |
| | 72.5 | 91.0 | 76.0 | 88.0 | 86.0 | 68.0 |
| | 91.5 | 91.5 | 82.0 | 78.0 | 73.5 | 82.5 |
| "Best of | 95.5 | 86.0 | 73.0 | 88.0 | 72.0 | 70.5 |
| 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 |

CHART/TABLE 1B - STUDENT TASKLIST EVALUATIONS

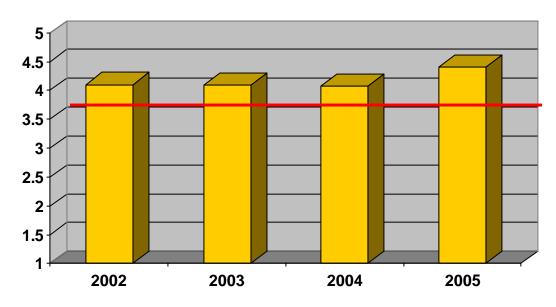


CHART/TABLE 2A – STUDENT COMPETENCY PROFILES



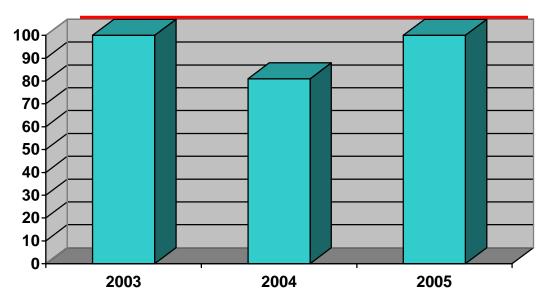
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Pass | Pass | Pass | Pass | Pass | Pass |
| | Pass | Pass | Pass | Pass | Pass | Pass |
| | Pass | Pass | Pass | Pass | Pass | Pass |
| | Pass | Pass | Pass | Pass | 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



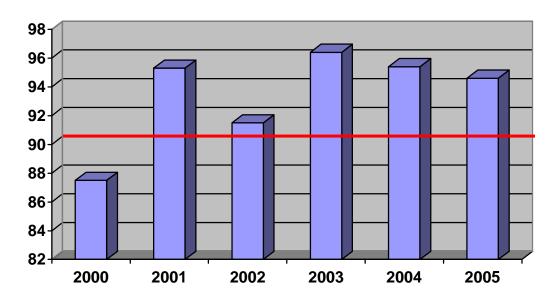
| | 2002 | 2003 | 2004 | 2005 |
|--|------|------|------|------|
| Average Overall Score (Likert Scale 1-5) | 4.10 | 4.09 | 4.07 | 4.40 |

CHART/TABLE 3A – NATIONAL MEDICAL LABORATORY WEEK PRESENTATIONS



| | 2003 | 2004 | 2005 |
|----------------|------------|-----------|------------|
| %Participation | 16/16=100% | 13/16=81% | 12/12=100% |

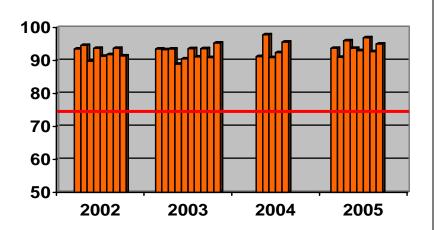
CHART/TABLE 3B – RESEARCH PRESENTATIONS



| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-----------------------|------|------|------|------|------|------|
| | 87 | 99 | 95 | 97 | 95 | 85 |
| | 88 | 97 | 100 | 94 | 100 | 82 |
| | 75 | 98 | 87 | 94 | 90 | 98 |
| | 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 |

CHART/TABLE 4A – STUDENT PROFESSIONAL EVALUATIONS

Student Professional Evaluation Averages (Average Per Student)



| | Graduating Class | | | | | | | | |
|------------|-------------------------|------|------|------|------|------|------|------|------|
| | 2002 | | 2003 | | | 2004 | | 2005 | |
| | 90.3 | 95.0 | 95.0 | 95.0 | 94.1 | 76.0 | 100 | 91.0 | 96.0 |
| | 87.8 | 95.3 | 91.0 | 91.4 | 96.0 | 92.0 | 97.0 | 94.0 | 98.0 |
| | 84.0 | 92.8 | 98.2 | 94.0 | 90.1 | 88.0 | 100 | 97.0 | 92.0 |
| | 89.1 | 84.7 | 97.0 | 95.0 | 97.5 | 99.0 | 100 | 90.0 | 91.0 |
| | 95.3 | 100 | 95.0 | 87.5 | 92.6 | 96.3 | | 95.0 | 97.0 |
| | 95.6 | 91.2 | 95.7 | 83.0 | 95.0 | 92.0 | | 95.0 | 92.0 |
| | 97.5 | 87.0 | 95.0 | 92.7 | 88.2 | 95.0 | | 94.0 | 99.0 |
| | 91.4 | 89.9 | 95.0 | 89.5 | 95.0 | 100 | | 95.0 | 96.0 |
| | 90.9 | 75.5 | 77.0 | 91.3 | | 97.7 | | 85.0 | 100 |
| | 95.0 | 94.6 | 88.0 | 96.0 | | 100 | | 89.0 | 100 |
| | 91.1 | 95.5 | 94.6 | 93.6 | | 95.0 | | 96.0 | 95.0 |
| | 91.0 | 95.0 | 92.1 | 95.0 | | 96.4 | | 93.0 | 82.0 |
| | 100 | 92.7 | 94.3 | 69.6 | | 96.4 | | 84.0 | 81.0 |
| Individual | 95.0 | 100 | 95.0 | 88.8 | | 99.0 | | 85.0 | 96.0 |
| Student | 92.7 | 91.0 | 91.0 | 89.0 | | 71.0 | | 99.0 | 99.0 |
| | 93.5 | 95.0 | 87.0 | 88.0 | | 95.0 | | 93.0 | 95.0 |
| Scores | 87.4 | 90.6 | 92.0 | 96.0 | | 92.0 | | 95.0 | 99.0 |
| (%) | 90.6 | 99.3 | 97.5 | 95.6 | | 93.0 | | 99.0 | 97.0 |
| (70) | 85.1 | 93.9 | 98.0 | 95.0 | | 95.0 | | 95.0 | 98.0 |
| | 95.3 | 95.0 | 94.0 | 90.4 | | 94.0 | | 97.0 | 93.0 |
| | 95.9 | 96.1 | 95.7 | 93.0 | | 96.0 | | 96.0 | 100 |
| | 95.0 | 88.5 | 94.3 | 90.0 | | 93.9 | | 97.0 | 93.0 |
| | 92.5 | 89.5 | 93.8 | 95.0 | | 91.0 | | 92.0 | 98.0 |
| | 84.7 | 95.0 | 96.4 | 95.0 | | 87.3 | | 98.0 | 91.0 |
| | 92.1 | 95.0 | 84.3 | 96.0 | | 95.7 | | 85.0 | 92.0 |
| | 90.3 | 95.6 | 89.9 | 95.0 | | 95.1 | | 88.0 | |
| | 83.2 | , | 92.9 | 93.0 | | 94.0 | | 99.0 | |
| | 93.5 | | 86.0 | 88.1 | | 90.0 | | 98.0 | |
| | 92.8 | | 95.0 | 96.0 | | 92.1 | | 91.0 | |
| | 93.8 | | 91.0 | 91.7 | | 83.0 | | 87.0 | |
| | 95.0 | | 94.0 | 95.0 | | 97.5 | | 95.0 | |