



OAKLAND
COMMUNITY
COLLEGE

Emergency Medical Technology

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Introduction

Purpose of the Study

The purpose of this study was to identify specific courses in which there were a high percentage of withdrawals or low academic performance. The results will be used for the purposes of reviewing courses and curriculum for future modifications in order to meet state and industry standards/mandates, certification and licensing requirements.

Methodology

To measure academic performance, 431 student grades were collected from a total of 12 EMT courses over the 2002-2003 academic year. The distribution of grades was analyzed by course. To measure the percentage of withdrawals for each course, 1279 students' status (active or withdrawal) was tracked at two different points in time. The tracking began the second count of the semester (which is the one-tenth day of the semester) and ended on the third count of the semester (which is the end of the semester) over the 2002-2003 academic year for 12 EMT courses.

A cross-tabulation statistical procedure was used to compute the percentages and raw scores for the grade distribution overall and by course. The median test was performed to determine if there were any statistical differences present between grade distribution and course.

A cross-tabulation was used to compute the percentages for student activity by course. The chi square test was performed to determine if any statistical differences existed between course and student activity in the course.

**Executive Summary
Major Findings
Emergency Medical Technology**

Grades

Of 431 student grades evaluated during the 2002-03 academic year the following was observed:

- 83.8% completed their respective courses with a grade of C or better.
 - 80.3% received a B- or better
 - 46.9% of those students received an A.
- 5.8% completed their respective courses with a grade of C- or below.
- The remainder, 10.3%,
 - withdrew from their courses, 5.9%
 - were auditing a course, 0.2%
 - did not receive a grade, 4.6%
 - received an incomplete, 3.2%

Course Completion

Of the 1279 students enrolled in thirteen courses during the 2002-03 academic year the following was observed:

- 1178 or 92.1% of the students remained active and completed the course by the end of the session.
 - The courses that experienced the lowest withdrawal rate, which was 0%, were the following:
 - 2602 (Paramedic I)
 - 2520 (Advanced EMT II and III)
 - 2522 (Advanced EMT II)
- 101 or 7.9% withdrew from their course by the end of the semester.
 - The courses that experienced the highest withdrawal rate were:
 - 1414 (Extended Basic EMT), 17.6%
 - 2430 (Medical Communications), 13.9%
 - 2510 (Advanced EMT I), 16.7%

Conclusion

There appears to be a weak relationship between course and student status. However, it should be noted that the different start dates for each course can effect the student status in a given course.

Although the grade point average for all of the courses combined is 3.08 it should be noted that the distribution of grades by course is statistically different. For instance, when the distribution of grades was evaluated for the entire sample, the median grade was a 3.70 (an A-). Fifty-three percent of the students received an A- or below while 47% scored above an A-. It should be noted that as the courses became more advanced, the number of students receiving an A- or below became greater.

When the students who received A's were removed from the sample, the median grade was a 2.70 (B-). Sixty-six percent of the students received a B- or below and 34% received above a B-. It was observed again that, for the most part, as the courses became more advanced the number of students in each course scoring below the average became greater.

Furthermore, when the students who scored A's and B's were removed from the sample and the grade distribution was reevaluated, the median grade was a 0.0 (as represented by F, WF, WP, or Incomplete). Thirty-six percent of the students scored above 0.0 (C or D) while 64% scored 0.0.

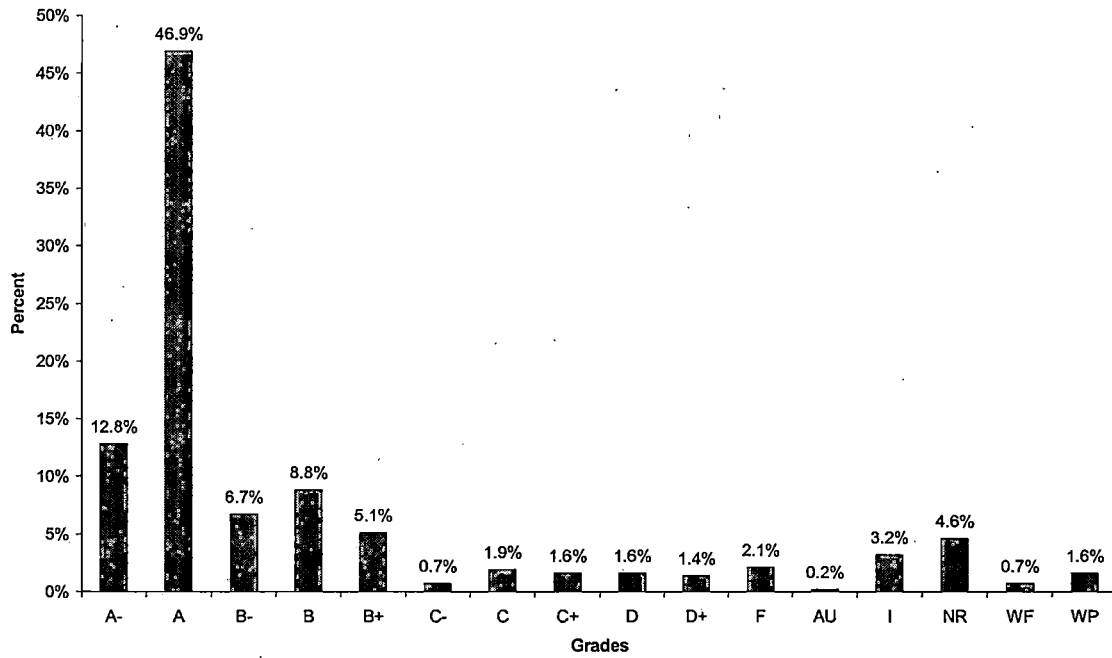
The above findings indicate that the distribution of grades fall into two almost disjoint sets. One set contains the very high performers as evidenced by the number of students (80.3%) who received a B- or better. The other set contains the remaining 19.7% who scored below a B-. The total 19.7% includes 12.4% of students who received grades of F, incomplete, no grade reported, withdraw/failing, or withdraw/passing.

So, the difference would be the C or D student of which there appears to be very few. As a result, below average performance by student is not being determined by C or D grades, but by the proportion of incomplete grades, no reported grades, withdraw/failing grades, withdraw/passing grades, or F grades.

Please refer to the appendix beginning on page 5 for more detailed information about grade distribution by course.

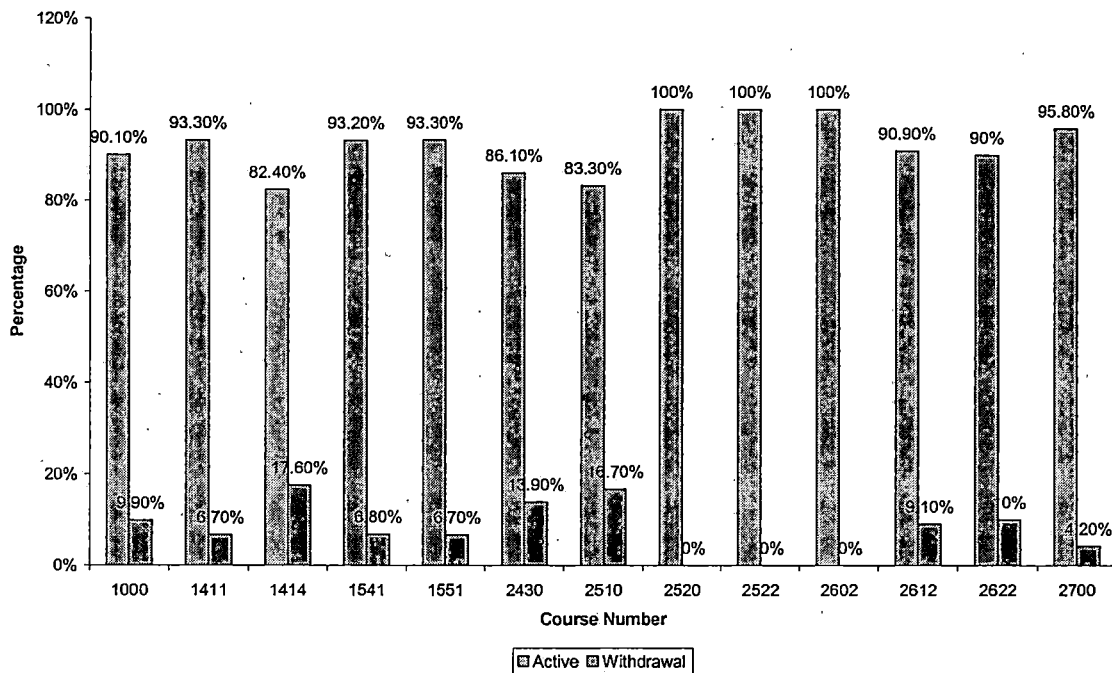
APPENDIX
CHARTS OF GRADE DISTRIBUTION AND STUDENT STATUS

Emergency Medical Technology Grade Distribution
 2002-03 Academic Year



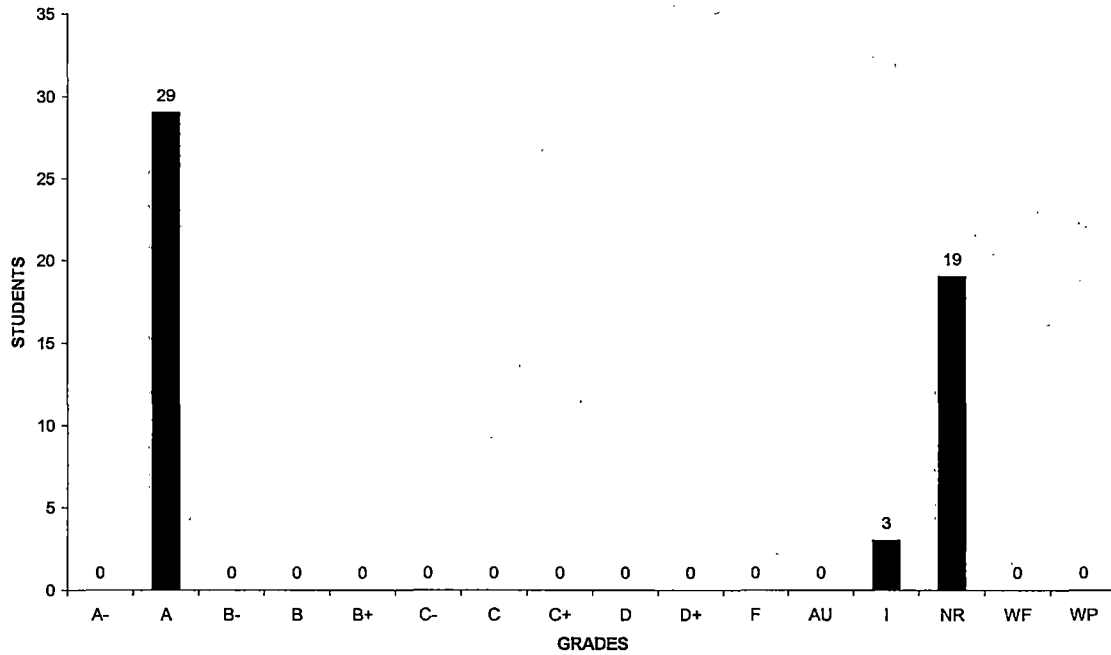
- 46.9% of the EMT students received an "A" as a final grade.

Emergency Medical Technology Student Completion Distribution
 2002-03 Academic Year



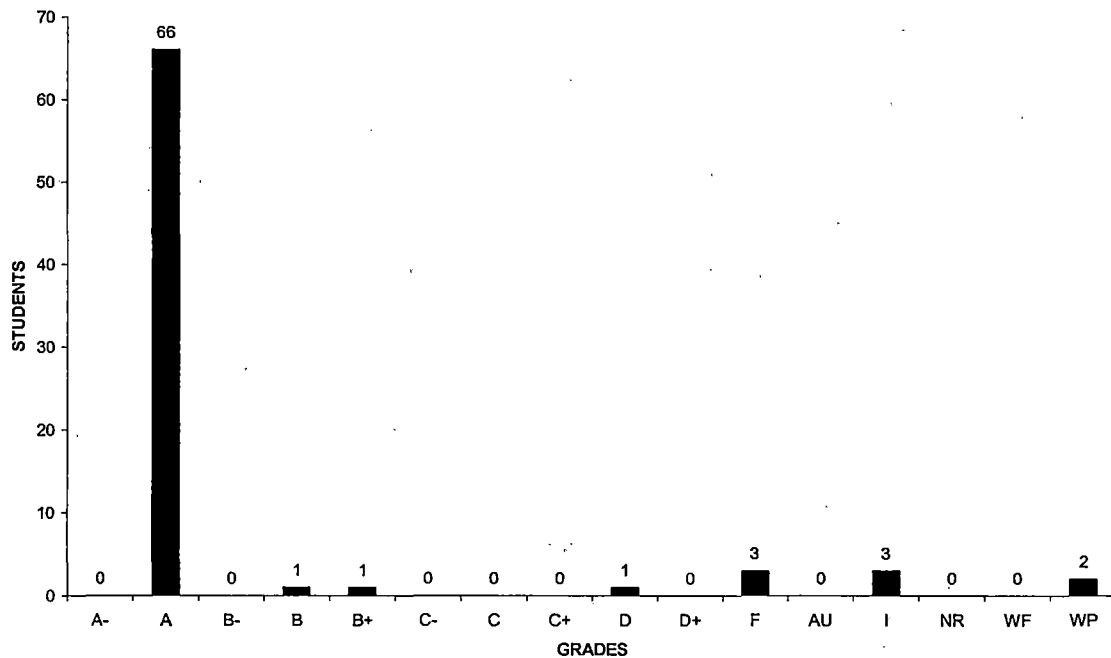
- 92% of EMT students remain active until the end of the semester.

EMT COURSE 1000 GRADE DISTRIBUTION BY STUDENT
 ACADEMIC YEAR 2002-2003



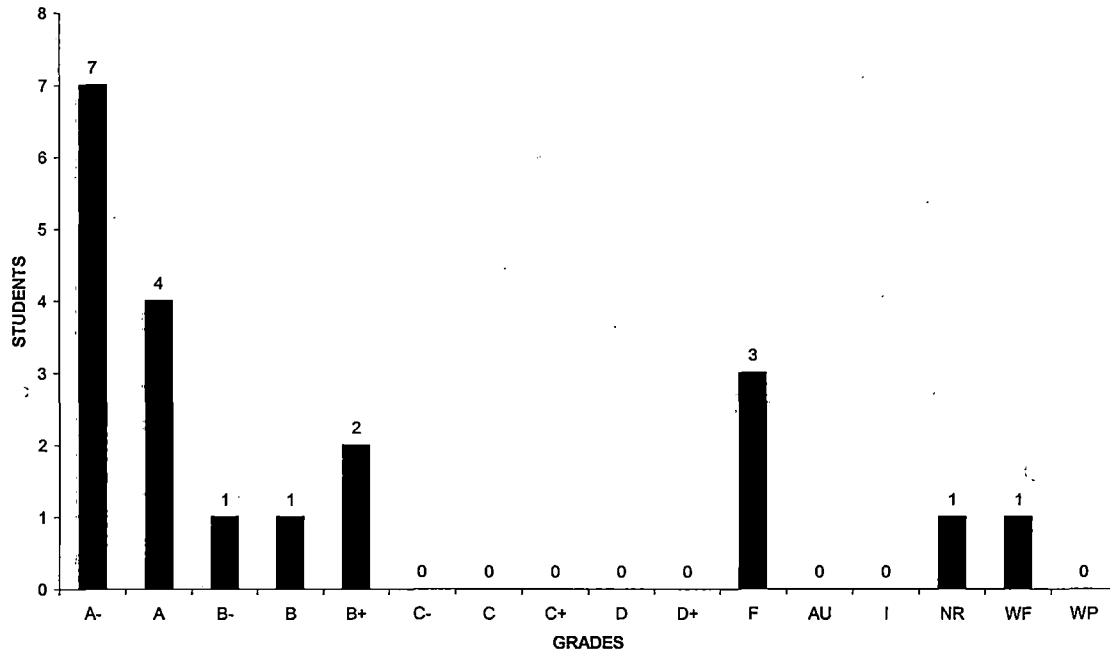
- Of 51 students in course 1000, 43% did not receive a grade.

EMT COURSE 1411 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



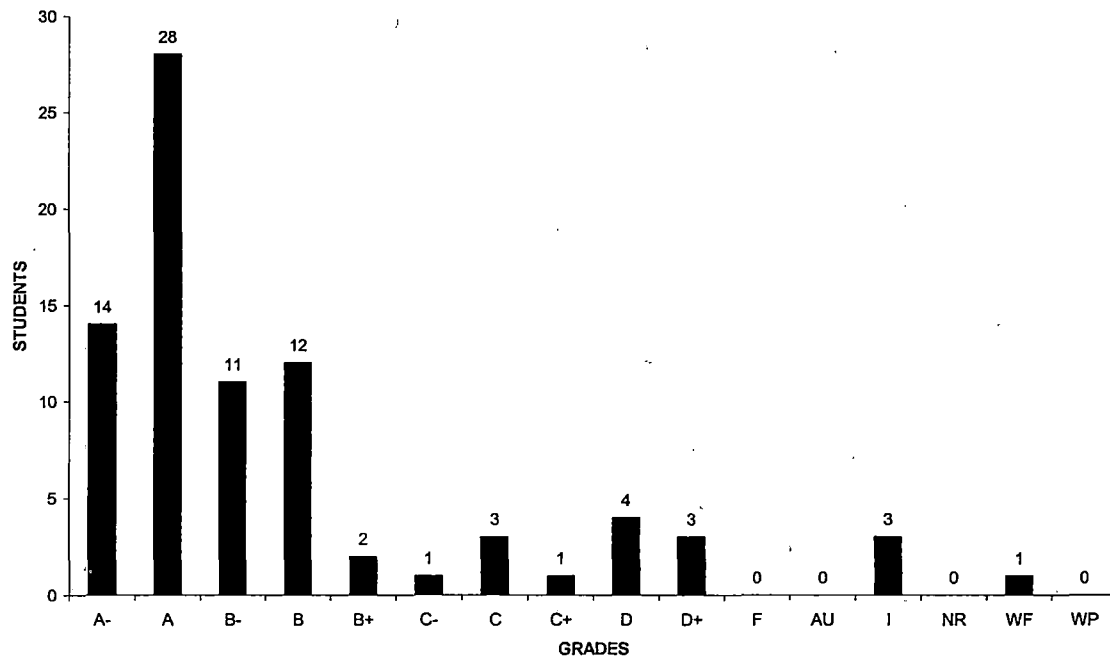
- Of 77 students evaluated in course 1411, 85.7% received an "A" as a final grade.

EMT COURSE 1414 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



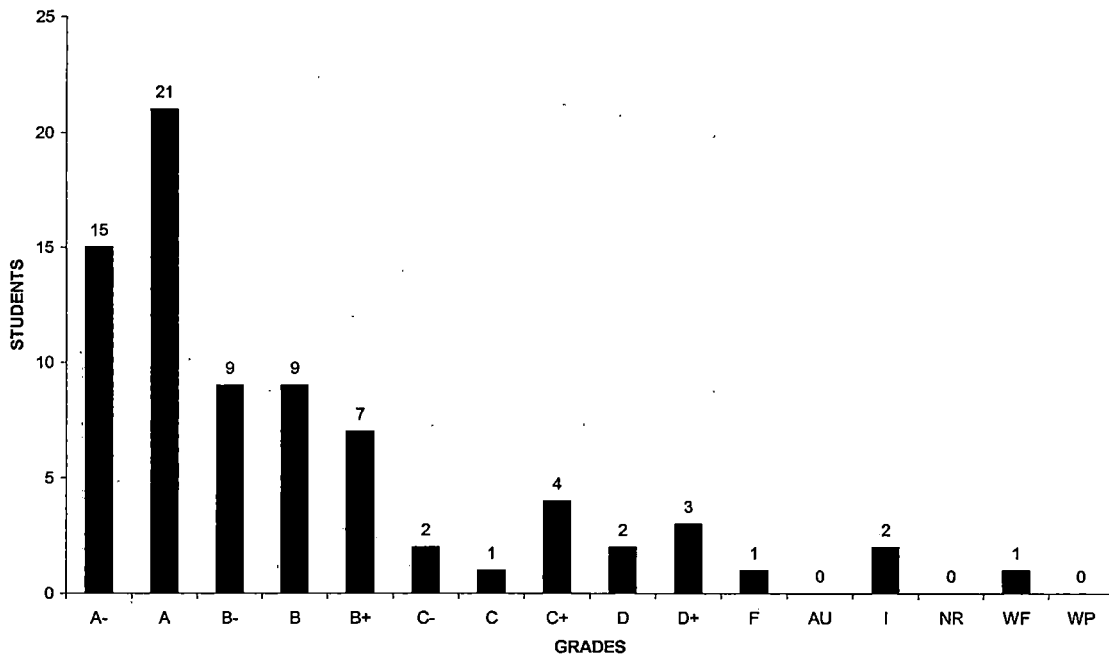
- Of 20 students evaluated in course 1414, 75% received a "C" or better.

EMT COURSE 1541 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



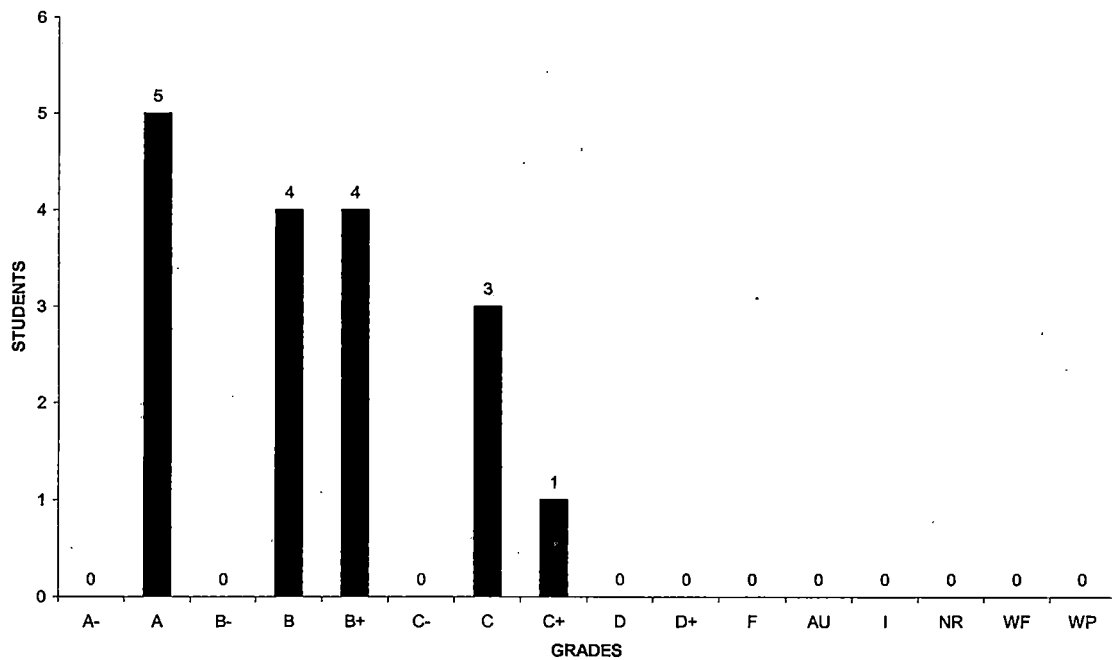
- 85% of the 83 students in course 1541 received a final grade of "C" or better.

EMT COURSE 1551 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



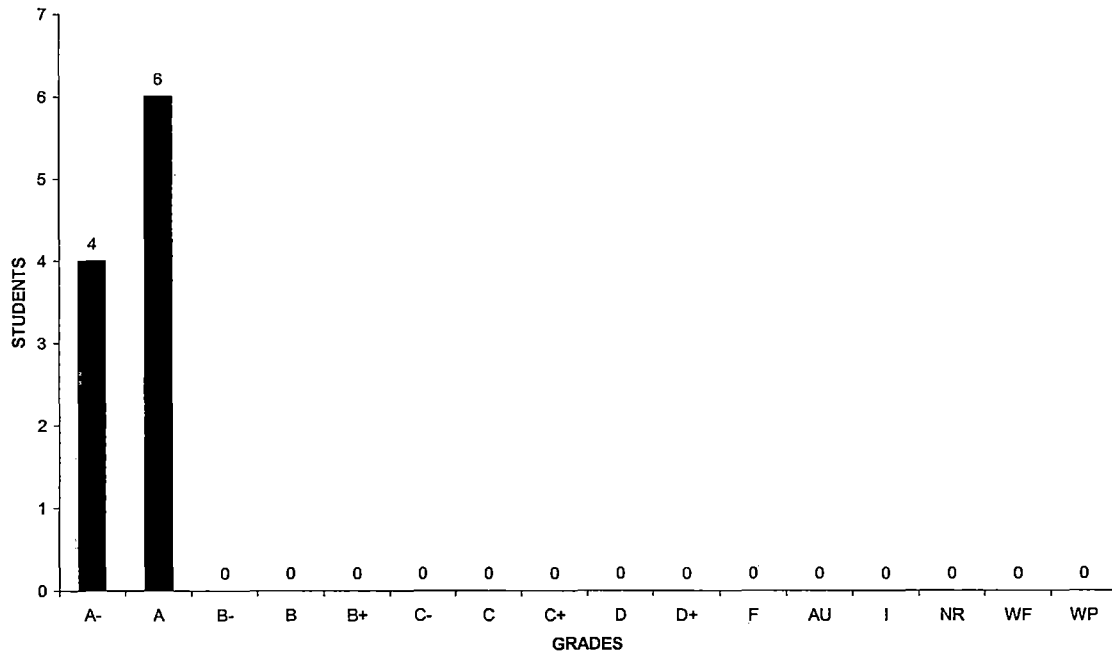
- 85% of the 77 the students in course 1551 received a final grade of “C” or better.

EMT COURSE 2430 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



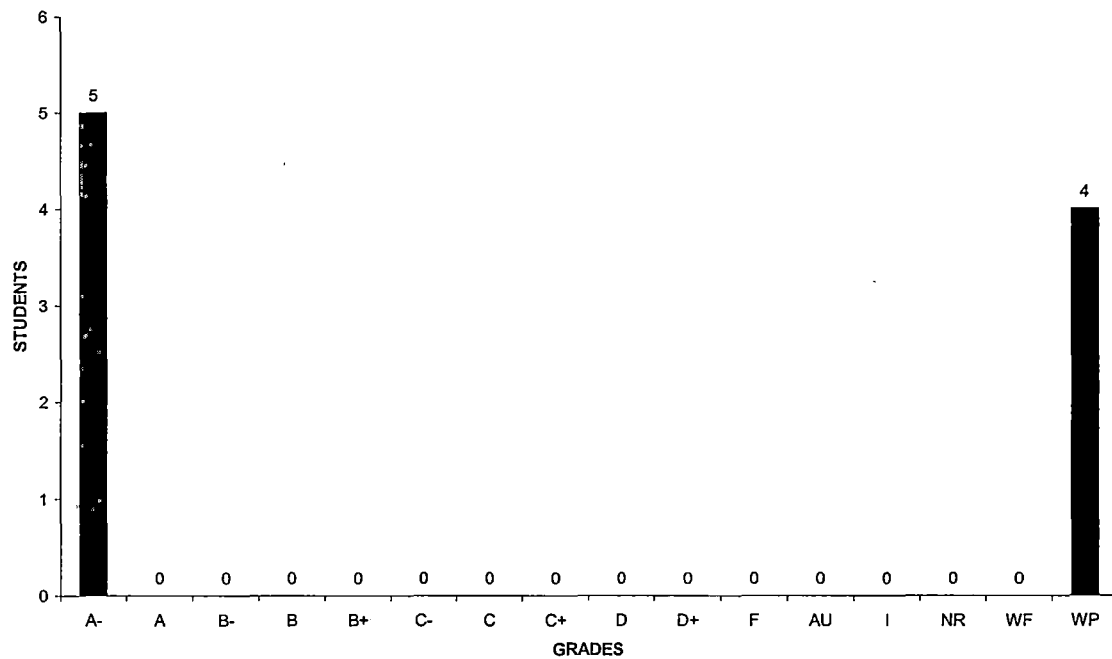
- All 17 students received a final grade of “C” or better in course 2430.

EMT COURSE 2510 GRADE DISTRIBUTION BY STUDENT
2002-2003 ACADEMIC YEAR



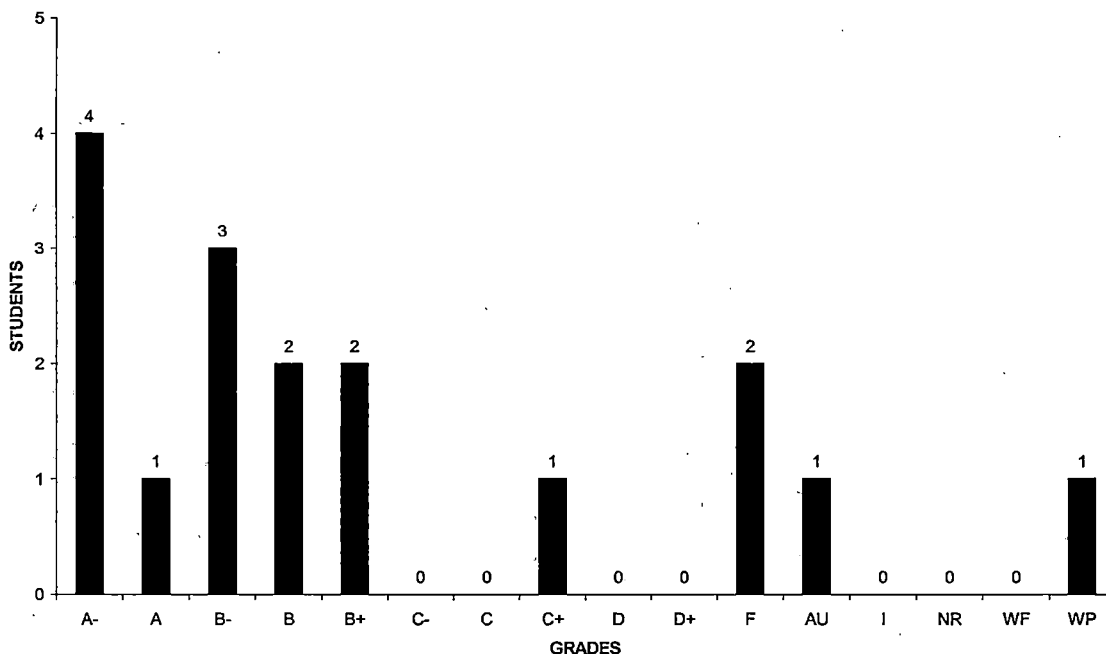
- All of the 10 students in course 2510 received an “A-“or better as a final grade.

EMT COURSE 2522 GRADE DISTRIBUTION BY STUDENT
2002-2003 ACADEMIC YEAR



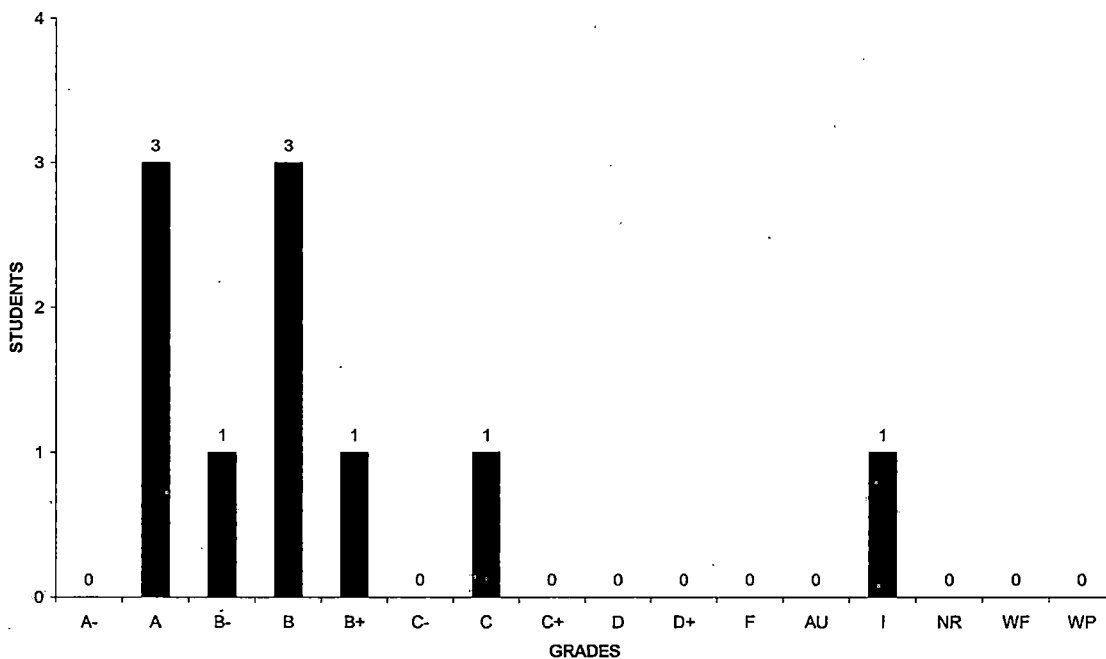
- Nearly 44.4% of the students in course 2522 received a final grade of withdrawal pass.

EMT COURSE 2602 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



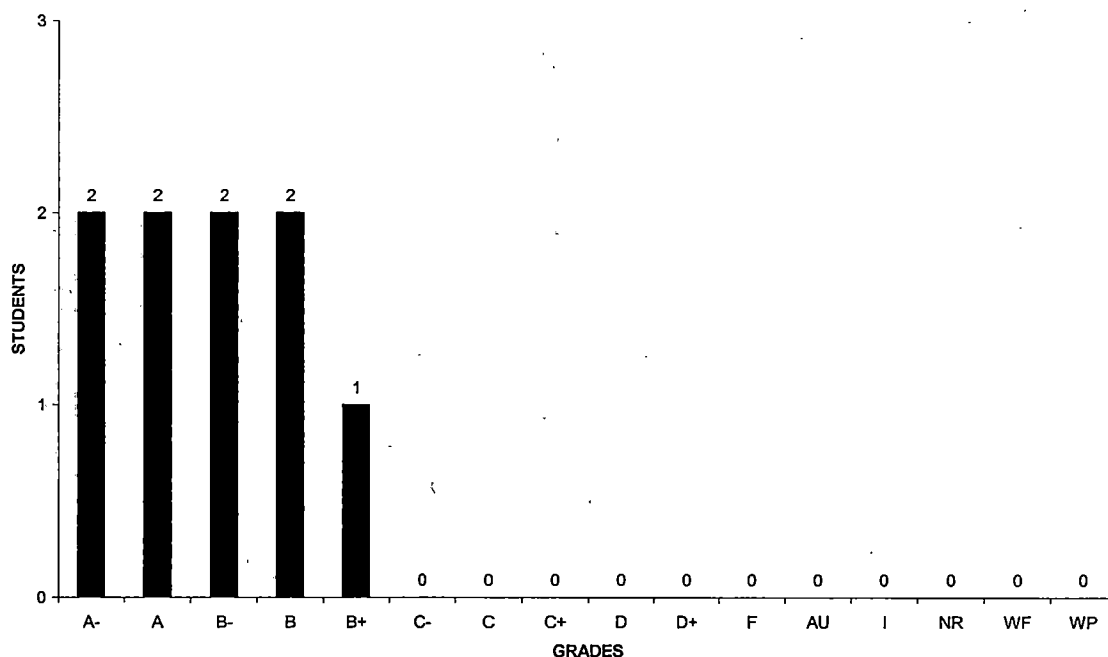
- Over 76.4% of the 17 students in course 2602 received a “C” or better as a final grade.

EMT COURSE 2612 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



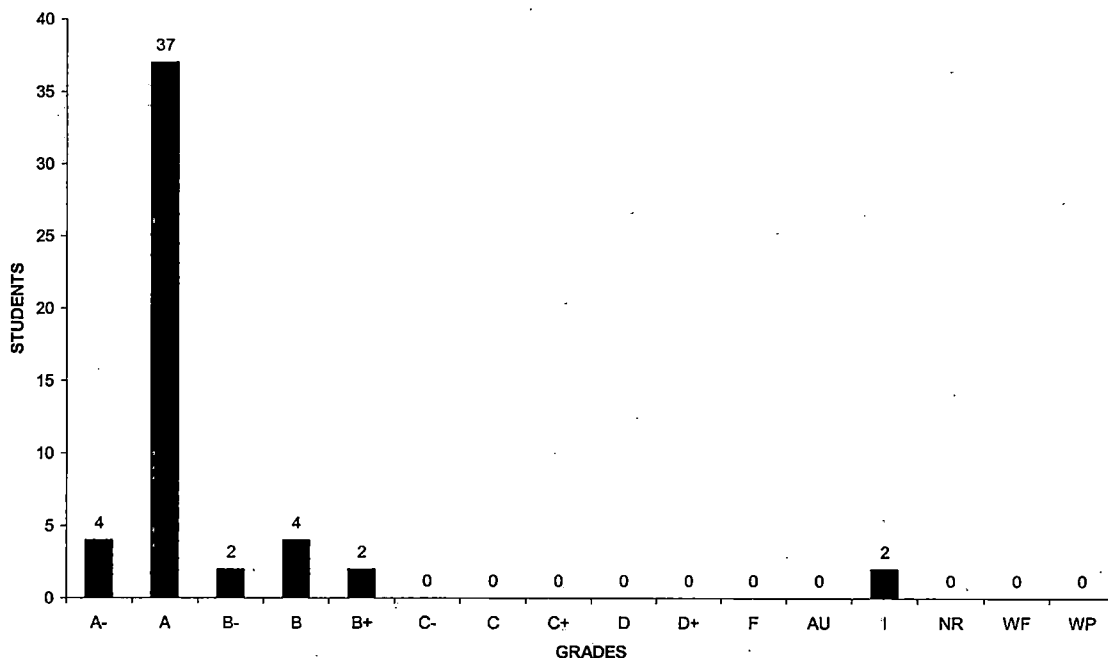
- 90% of the students in course 2612 received a grade of “C” or better as a final grade.

EMT COURSE 2622 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



- All 9 students received a "B" or better as a final grade in course 2622.

EMT COURSE 2700 GRADE DISTRIBUTION BY STUDENT
 2002-2003 ACADEMIC YEAR



- 92.1% of the 51 students in course 2700 received a final grade of "B" or better.

Degree Trends 00-01

Tab Name	Explanation of Sheet
Revision Notes	A listing of the changes made to the file.
Instructions	Directions for printing and saving the report are stored here. Any special notes to the user are also stored on this sheet.
Dialogue Box	This is where you enter the Program Code. Once this is entered the formulas are calculated.
Associates Warehouse	The data for the associate degrees is stored here. It is updated annually around October – November.
Certs Warehouse	The data for the certificates is stored here. It is updated annually around October – November.
Data Bivouac	This is where the data associated with the Program Code you entered is held for the report. Collegewide data is placed here as well.
CIP Codes	This table consists of Program Code, Credits Required, CIP Code, Program Name, Degree Level, and Status. It is used as a look-up table for the warehouses.
occ and non-trad codes	This table is similar to the CIP table but includes occupational and non-traditional codes. It is also used as a look-up table for the warehouses.
Top 5 SCH	Shows the top 5 Degree awarded.
Collegewide 3 yr moving mean	The moving mean, and high and low standard deviation is calculated and graphed for the 10 most recent years of total Degrees and Certificates awarded. The graph is included in the report.
Rate of Change	The rate of change in the number of degrees and certificates are calculated and graphed individually. These graphs are included in the report.
assoc change	Programs are ranked by the number of degrees awarded. The percent of change is calculated for 1, 5, and 10-year intervals.
1 yr assoc	Programs are ranked by the 1 Year percent of change in the number of degrees awarded. The 5 and 10-year calculations are also shown.
5 yr assoc	Programs are ranked by the 5 Year percent of change in the number of degrees awarded. The 1 and 10 year calculations are also shown.
10 yr assoc	Programs are ranked by the 10 Year percent of change in the number of degrees awarded. The 1 and 5 year calculations are also shown.
Ranked assoc	Degree awards are ranked by current year showing 1, 5, and 10-year positions. This sheet was combined with the certificate and SCH rankings and circulated as a stand-alone Adobe file.

cert change	Programs are ranked by the number of certificates awarded. The percent of change is calculated for 1, 5, and 10-year intervals. .
1 yr cert	Programs are ranked by the 1 Year percent of change in the number of certificates awarded. The 5 and 10-year calculations are also shown. .
5 yr cert	Programs are ranked by the 5 Year percent of change in the number of certificates awarded. The 1 and 10 year calculations are also shown.
10 yr cert	Programs are ranked by the 10 Year percent of change in the number of certificates awarded. The 1 and 5 year calculations are also shown.
Ranked cert	Programs are ranked by current year showing 1, 5, and 10-year positions. This sheet was combined with the associates and SCH rankings and circulated as a stand-alone Adobe file.
Cover Sheet	This is the cover sheet used in the program report.
Sum	This is the summary sheet used in the report. It is customized for your Program Code.
Program 10 Yr Trends	The number of Program degrees and certificates from the most recent 10 years of are entered and graphed.
Program Rate of Change	The rate of change of degrees and certificates is calculated and graphed. The most recent 10 years is used. Only the graph is included in the report.
Program 3yr mean	The moving mean, and high and low standard deviation is calculated and graphed for the 10 most recent years of awards. The change rate for both degrees and certificates are calculated and graphed. Only the graphs are included in the report.
Collegewide 10 Yr Trend	The number of degrees and certificates from the most recent 10 years of are entered and graphed. This sheet is used in the report.
Violet Text	These pages are used in the Program Report
Green Text	These pages are used for the Collegewide Report
Mixed Text	This page is used in both Reports

VIEW

Report Mgr

Dialogue Box

Single Program Reporting

To look up the Degrees Report for a single program, enter the Program code found in the chart below into the following cell. The program name will appear automatically.

(TYPE IN / ENTER)

Program Code

ACC

Program Name

Accounting

Program Code	Program Name				
ACC	Accounting			What Year Is The Data For? Please enter the year to appear on cover sheet in the following box. <div style="border: 1px solid black; padding: 5px; display: inline-block;">2000-01</div>	
ACH	Architecture				
ALD	Alternate Energy-System Design				
ALM	Alternate Energy - Management				
ALS	Alternate Energy - Special				
ALT	Alternate Energy Technology			Collegewide Degree Trends Report Printing Please click the bottom if you want a printout of the Collegewide Degree Trends Report	
ARC	Architectural Engineering				
ARE	Automotive Tech Retailing				
ASA	Assessment Administration				
ASC	Science				
ASR	Automobile Servicing				
ATW	Welding Technology See WEL				
AUD	Audio-Visual Technology				
AUO	Auto Operations				
AUT	Automotive Tech Engineering				
AVF	Aviation Flight Technology				
AVM	Aviation Management				
AVN	Aviation Management Option				
AVT	Aviation Maintenance Technology				
BAK	Baking and Pastry Arts				
BAT	Broadcast Arts Technology				



**Degree Trends & Credit Hour Trends
Report Retrieval Instructions**

Degree Trends Report

To Open:
I/
Internal Reporting/
Enrollment/
Degree Trends/
Degree Trends 01(Excel)

Select Dialogue Box Sheet Reports are selected from The Dialogue Box.

Type in Program Code - Enter Program Name will appear in the next box
If you need help, scroll the lists on the left side of the page to find desired program code

Prepare to run or view Report

Set up your PC:
Go to Tools / Add-ins/ Report Manager
select OK

Run Report

- Go to View on tool bar
- Click Report Manager
- Select Print Program
- Select copy #
- Ok

Credit Hour Trends Report

To Open:
I/
Internal Reporting/
Enrollment/
Credit Hour Trends/
Credit Hour Trends Reports 0001
select "Read only"

Select any one of the reports and answer the prompt "No"

The Dialogue Box appears from which reports can be selected

Type in Program Code - Enter Program Name will appear in the next box
If you need help, scroll the lists on the left side of the page to find desired program code

Prepare to run or view Report

Set up your PC:
Go to Tools / Add-ins/ Report Manager
select OK

Run Report

- Go to View on tool bar
- Click Report Manager
- Select Print Discipline
- Select copy #
- Ok