

# Department of Mathematics

## Strategic Action Plan

### 2004 - 2005

**Date Submitted: December 5, 2003**

Revised: January 30, 2004

Unit Goal #1: Increase Faculty and Student Research Opportunities

Unit goal supports:    Division Goal # 2 & 3      Assoc./Asst. VP Administrative Goal # N/A      College Goal # 2, 3, & 5  
*(For alignment purposes, enter the corresponding goal number after the # sign for at least one of the three categories above.)*

[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #1: Increase the number of publications by faculty and students of the Department of Mathematics by 15%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** The Department chair, with the help of the LSAMP Coordinator and Department's Planning Committee Chair will inform the faculty to maintain an updated record of their publication progress in the department's files. These publication records will follow the College guidelines, and they will be used to fill out the forms submitted to the College for AY 2004 and for AY 2005. Progress reports will be presented in the Spring 2004 and 2005.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Increase number of students with undergraduate research experience	Department Chair, LSAMP Coordinator and chair of department's Planning Committee	None	August, 2005	Count of number of students involved in undergraduate research with Department faculty; compare to previous year.
Increase number of graduate students pursuing masters' research projects.	Department Chair, LSAMP Coordinator and chair of the department's Planning Committee	None	August, 2005	Headcount of graduate students in these projects compared to AY 2004
Work towards a merit system that encourages publication.	Department Chair	New	August, 2005	Statements in new Department merit document rewarding faculty for these

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
				activities.

**Unit Goal #1: Increase Faculty and Student Research Opportunities**

Unit goal supports: Division Goal # 2 & 3 Assoc./Asst. VP Administrative Goal # N/A College Goal # 2,3, & 5  
*(For alignment purposes, enter the corresponding goal number after the # sign for at least one of the three categories above.)*

[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #2: Increase the number of research presentations made by faculty and students by 15%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** The Department Chair, with the help of the LSAMP Coordinator and Department’s Planning Committee Chair, will monitor the progress and organize activities to increase the number of faculty research presentations for AY 2005, and compare the number of those in AY 2004. Progress reports will be presented in the Spring 2004 and 2005 departmental retreats.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Increase number of students with undergraduate research experience	Department Chair, LSAMP Coordinator and chair of department’s Planning Committee	None	August, 2005	Count of number of student’s involved in undergraduate research with Department faculty. Count publications in AY 2005 and compare to AY 2004.
Increase number of graduate students pursuing master theses	Department Chair, LSAMP Coordinator, and chair of the department’s Planning Committee	None	August, 2005	Headcount of graduate students in theses projects compared to AY 2004.
Work towards a merit system that encourages publication	Department Chair	None	August, 2005	Statement in Department merit document that rewards faculty for presentations contributions.

**Unit Goal #1: Increase Faculty and Student Research Opportunities**

Unit goal supports: Division Goal # 2 & 3      Assoc./Asst. VP Administrative Goal # N/A      College Goal # 2,3, & 5  
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[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #3: Increase the number of external grants received by faculty by 10%, and the number of proposals submitted by 15%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** The Department Chair with the help of the chair of the department’s Planning Committee will encourage and facilitate faculty to increase the number of proposals funded for AY 2005 and compare the number to those of AY 2004. Only research proposals submitted and funded during the assessment period will be considered in this count. Faculty will be asked to keep the department’s research files updated including submitted and funded proposals, to facilitate the assessment of this objective.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Continue to develop and submit research participation proposals	Department Chair, Chair of department’s Planning Committee and tenure/tenure track faculty.	None	August, 2005	Count number of proposals.
Allow discretionary release time	Department Chair and Dean of COS&E	Release time approval by Provost	August, 2005	Discretionary release time authority to Dean.

**Unit Goal #1: Increase Faculty and Student Research Opportunities**

Unit goal supports:    Division Goal # 2 & 3        Assoc./Asst. VP Administrative Goal # N/A        College Goal # 2,3, & 5  
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[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #4: Increase the number of student credit hours in research courses by 10%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** The department chair, with the help of the chair of the department’s Planning Committee, will determine the number of research semester hours produced by the department for AY 2005 and compare the hours to those of AY 2004. Both graduate and undergraduate SCHs will be considered for this count. The end of each respective academic year (August 31) will be used as the effective date for counting.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Increase numbers of students enrolled in courses requiring research projects	Department Chair and Graduate Coordinator	None	August, 2005	Number of credit hours for theses courses vs. those hours from previous years.

**Unit Goal #1: Increase Faculty and Student Research Opportunities**

Unit goal supports:    Division Goal # 2 & 3        Assoc./Asst. VP Administrative Goal # N/A        College Goal # 2,3, & 5  
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[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #5: Increase the number of students with undergraduate research experience by 10%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** The faculty of the department of Mathematics will be asked to maintain their research file updated with their student-based research activities, in order to facilitate the College dean’s research records. The end of each academic year (August 31) will be used as the official counting date.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Obtain more research grants so as to fund undergraduate research students	Department Chair, chair of the Department's Planning Committee tenure/tenure track faculty.	None	August, 2005	Number of successful research grants compared to AY 2004.
Having a merit system that rewards working with undergraduates	Department Chair	None	August, 2005	Statement in Department's Annual Evaluation document that shows credit for faculty engaged in undergraduate research activities.

**Unit Goal #1: Increase Faculty and Student Research Opportunities**

Unit goal supports: Division Goal # 2 & 3      Assoc./Asst. VP Administrative Goal # N/A      College Goal # 2,3, & 5  
*(For alignment purposes, enter the corresponding goal number after the # sign for at least one of the three categories above.)*

[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #6: Increase the number of faculty participating in student-based activities by 10%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** Faculty of the department of mathematics will be asked to keep the department's research files updated on a monthly base listing their student-based research activities. The Department chair will receive a report from the chair of the Planning Committee with a summary of the forms submitted by the faculty to the College.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Have department engage in additional student-based activities	Department Chair, chair of department's Planning Committee and tenure/tenure track faculty	Some funding may be necessary to initiate College-level student-based activities	August, 2005	Increase in student-based activities from AY 2004.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Develop merit incentives to reward faculty participating in student-based activities	Department Chair and Chair of the Annual Evaluation Committee	None	August, 2005	Statements in Department Annual Evaluation document showing credit for faculty participating in such activities.
Placing incentives in Department tenure and promotion document	Dean	None	August, 2005	Statement in Department Tenure and Promotion documents showing credit for faculty participating in such activities.

**Unit Goal #1: Increase Faculty and Student Research Opportunities**

Unit goal supports: Division Goal # 2 & 3      Assoc./Asst. VP Administrative Goal # N/A      College Goal # 2,3, & 5  
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[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #7: Increase the number of students matriculating into graduate programs by 10%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** The Department chair with the help of the Graduate Coordinator will report to the dean, by August 31 of AY 2004 and AY 2005 the number of students matriculating in the department’s M.S.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Cooperate with Dean of COS&E effort to increase partnerships with regional institutions so as to develop automatic admissions research programs	Department Chair and Graduate Coordinator	None	August, 2005	Develop two additional partnerships with state, regional or national universities that provide a pathway for students seeking programs.
Continue to establish collaborative	Department Chair and	None	August, 2005	Evidence for two additional

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
arrangements or partnerships to support summer research for students	LSAMP Coordinator			collaborations that offer summer research opportunities for UTPA students
Create the masters theses option in the MS in Mathematics	Mathematics Graduate Coordinator	None	August, 2005	Submit proposal to the Graduate Council.

**Unit Goal #2: Managing increasing enrollment while preserving release time for faculty**

Unit goal supports:    Division Goal # 5                    Assoc./Asst. VP Administrative Goal # N/A                    College Goal # 5  
*(For alignment purposes, enter the corresponding goal number after the # sign for at least one of the three categories above.)*

[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #1: Manage course offerings to increase SCH production per dollar of cost by 5%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** The Department chair will determine the SCH production per dollar cost for AY 2004 and for AY 2005, and will include this information in his Annual Report, submitted to the dean of the College by October 2005 and the faculty of the department Summer SCH production will be considered as part of the assessment, and will be reported to the dean of the College by August 31 of AY 2005.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Develop teaching strategies to allow non-research faculty a 15-hour teaching load	Department Chair	None at lecturer level	August, 2005	Present proposal to Dean of COS&E.
Develop an Evening component in the department	Department Chair	Funds to hire staff to support Evening College and to pay for adjunct faculty will be required	August, 2005	Compare number of evening sections taught by Department units as compared to those in AY 2004.
Investigate larger sections of selected courses to help SCH	Department Chair	None	August, 2005	Measure Department's SCH production per dollar of cost.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
production while allowing flexibility to keep some sections small				
Increase on-line and distance learning offerings	Department Chair and distance learning faculty	Funds to pay stipends for faculty teaching on-line course	August, 2005	Measure Department's SCH production per dollar of cost.

**Unit Goal #3: Increase resources development/fund raising through gifts and donations**

Unit goal supports: Division Goal # 7                      Assoc./Asst. VP Administrative Goal # N/A                      College Goal # 7  
*(For alignment purposes, enter the corresponding goal number after the # sign for at least one of the three categories above.)*

[The measurable objective must express an expected outcome and include the performance indicator (quantitative/qualitative standard to achieve).]

**Measurable Objective #1: Increase the funding generated in support of research, teaching, student development, and scholarship by 10%.**

[The method of assessment must describe the how, who, and when.]

**Method of assessing achievement of measurable objective:** Principal investigators' and interested faculty will present reports of their progress cooperating with External Affairs to obtain gift and donations.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
Work closely with External Affairs, with community businesses, and with advisory councils to increase gift and donations funding	Department Chair and projects principal investigators	None	August, 2005	Increase number of gift/donation funds for Department in AY 2005 vs AY 2004.
Develop Department's marketability to attract additional numbers of donors	Department Chair and principal investigators	Funding to increase marketability will be required	August, 2005	Development of brochures and newsletters to increase marketability of Department.
Cooperate with Dean of COS&E establishing collaboration with other universities and with regional and national industries to obtain	Department Chair and principal investigators	None	August, 2005	Additional two collaborations with other institutions/industries will be evidence of achievement.

Strategies for Achieving Measurable Objective	Person(s) Responsible	New Resources Required	Target Date during 2004-05	Evidence of Achievement
resources not currently available to the Department				