## **APPENDIX 15**



# DIVISION OF BUSINESS AY 2010-2011 ASSESSMENT REPORT ISSUED: FALL 2011

# **Program Outcomes for All Division of Business**

# 1. Student Learning Results

Graduating students should have basic knowledge of the various disciplines in business.

During the MGMT 4433 Business Policy course the students will take the Major Field Test (MFT).

		Analysi	is of Results								
Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph available data up to five years)						
75% of the students will score above the 50 <sup>th</sup> percentile on the Major Field Test in Business.	Major Field Test  Direct External Summative Comparative	Scores have remained fairly consistent over past five years. The scores have not been close to meeting target.	As of 2010-11 the MFT was incorporated into Policy class. The MFT was worth 5% of the student's grade.  The historic MFT results were one factor in the decision to seek ACBSP accreditation.  The MFT scores and ACBSP accreditation process resulted in a significant change in the curriculum effective in Fall 2010.  Effective AY 2011-12, instituted courselevel assessment to standardized learning outcomes for each course.	It is too early to determine if the ACBSP accreditation process, courselevel assessment and curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It will not be until AY 2012-13 that the graduating seniors will be under the new curriculum.  As for incorporating the MFT into a class, the impact was minimal at best. The percentage of the grade was increased to 10% in AY 2011-12.	80 - 70 - 70 - 70 - 70 - 70 - 70 - 70 -	2007	2008	2009	2010	2011	*** % At or above 50th Percentile *** Target

## 1. Student Learning Results (continued)

## Graduating students should have basic knowledge of the various disciplines in business.

During the MGMT 4433 Business Policy course the students will take the Major Field Test (MFT).

			the students will t		( )
Performance	Description of	Areas of	Analysis and	Results of	Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all
Measure	Measurement	Success	Action Taken	Action Taken	available data up to five years)
(Competency)	Instrument			(occurs in the	
				following year)	
The institution	Major Field	This	Seek ACBSP	It is too early to	
mean MFT	Test	assessment	accreditation	determine if the	153 —
score will be		process was		ACBSP	152.5
above our	Direct	instituted in	Change	accreditation	
identified peer	External	AY 2010-11	curriculum to a	process, course-	152
institutions.	Summative		more traditional	level	151.5
	Comparative	Summer	Business	assessment and	151
		2011 - 149.2	curriculum	curriculum	150.5
				changes have	150 NWOSU
		Spring 2011	Incorporate MFT	had an impact,	149.5 Page Magn
		-152.3	into Business	as the	Peer Mean
			Policy and have	graduating	149
		Fall 2010 -	the MFT results	students in	148.5
		151.3	count toward the	2010-11 were	148
			final grade.	under the old	147.5
		Peer		curriculum. It	Fall 2010 Spring Summer Fall 2011
		Institution	Effective AY	will not be until	. •
		Mean –	2010-11,	AY 2012-13	2011 2011
		152.2	instituted course-	that the	
			level assessment	graduating	
			to standardized	seniors will be	
			learning	under the new	
			outcomes for	curriculum.	
			each course.		
				As for	
				incorporating	
				the MFT into a	
				class, the	
				impact was	
				minimal at best.	
				The percentage	
				of the grade	
				was increased	
				to 10% in AY	
				2011-12.	
		l	l	2011-12.	

# **Program Outcomes for All Division of Business**

## 2. Student Learning Results

Graduating students should have well developed communication skills and be competent in the use of technology.

During MGMT 4433 *Business Policy* course the students will prepare and make a presentation that will be assessed based on a faculty-developed rubric.

		Analysis	of Results			
Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Yea available data up to five years)	rs (please graph all
80% of the students must score at or higher than acceptable on a faculty-approved rubric.	Stockholder presentations were assessed by faculty using a 5-point scale with an average score of 3.0 or above meeting the criteria  Direct Summative Internal	Spring 2011- 22 out of 24 students (92%) scored 3.0 or above on the communication skills element  20 out of 24 students (83%) scored 3.0 or higher on technology competency  Summer 2011- 18 out of 20	The assessment for this outcome provided data that demonstrated that students exceeded the expected level of assessment for communication skills.  Data demonstrates that students are not meeting expectations in	Tollowing year)	Communication Skills  100 95 90 85 80 75 70 65 60 55 50 Spring 2011 Summer 2011 Fall 2011	
		students (90%) scored 3.0 or above on the communication skills element  13 out of 20 students (65%) scored 3.0 or higher on technology competency	technology competence. This measure should be monitored for further data collection.  No change is planned in the immediate future as further data points are necessary to determine whether changes are necessary.		Technology Competence  100 95 90 85 80 75 70 65 60 55 50 Spring 2011 Summer 2011 Fall 2011	Actual Goal

### **Program Outcomes for All Division of Business** 3) Graduating students are expected to think critically. **Analysis of Results** Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all Performance Description of Analysis and Results of Areas of Measure Measurement Success Action Taken Action Taken available data up to five years) (Competency) Instrument (occurs in the following year) **BUSINESS ACUMEN** The class Students Comp-XM Seek ACBSP It is too early to participated in determine if the median scores two accreditation 60 percentile on Comp-XM measures -ACBSP Business simulation accreditation Business Change 50 curriculum to a process and Acumen and Acumen Business Direct (BA) and more traditional curriculum 40 Knowledge will Summative Business Business changes have each be at or had an impact, External Knowledge curriculum above the 50<sup>th</sup> **►**NWOSU Comparative (BK). as the 30 percentile. Institute coursegraduating Target Results in level assessment students in 20 AY 2010-11 2010-11 were were: In FIN 3163 under the old 10 curriculum. It coverage of cost Fall 2010 of capital was will not be until 0 BA 29<sup>th</sup> doubled in Fall AY 2012-13 percentile Fall 2010 2011. that the Spring 2011 Summer 2011 BK 53<sup>rd</sup> graduating seniors will be percentile BUSINESS KNOWLEDGE under the new curriculum. Spring 2011 60 -BA 25<sup>th</sup> percentile Course-level 50 BK 35<sup>th</sup> assessment has percentile not completed 40 one cycle yet, Summer so it is too early NWOSU 30 2011 to see an impact BA 23<sup>rd</sup> **I**→Target 20 percentile BK 14<sup>th</sup> percentile 10 0 Fall 2010 Spring 2011 Summer 2011

# **Program Outcomes for All Division of Business**

4) Graduating students are expected to possess good interpersonal skills.

During the MGMT 4433 Business Policy course the students will complete a team Simulation and associated presentation. Peer evaluation of the interpersonal communication/teamwork on the simulation team will be measured using a rubric.

		Analysis	of Results			
Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (pl available data up to five years)	ease graph all
80% of the students must score at or higher than the acceptable on a faculty-approved rubric.	Peer Evaluations Indirect Summative Internal	Fall 2010 – 100% Spring 2011 – 65% Summer 2011 – 76%	Data collected show that student performance has been inconsistent across three data points available.  Starting in Fall 2012 a group simulation will be incorporated into MRKT 3043 to introduce the group work		100 90 80 70 60 50 40 30 20 10 0 Fall 2010 Spring 2011 Summer 2011	
			and the idea of peer evaluation prior to a student reaching the capstone course.			

### **Program Outcomes for All Division of Business** 5) Graduating students should have the ability to formulate good ethical judgments. Analysis of Results Description of Analysis and Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all Performance Areas of Results of Measure Measurement Success Action Taken Action Taken available data up to five years) (occurs in the (Competency) Instrument following year) 80% of the Fall 2010: It is too early to Further data **Ethics Game** 94 students must determine if the collection is simulation 92% 92 ACBSP needed to score at or accreditation higher than determine if 90 Direct Spring 2011: acceptable on process and changes are 92% Formative 88 a facultycurriculum needed. External approved changes have had 86 rubric. an impact, as the Actual 84 graduating 82 students in 2010--Goal 11 were under the 80 old curriculum. It 78 will not be until 76 AY 2012-13 that the graduating 74 seniors will be Fall 2010 Fall 2011 Spring 2011 under the new curriculum. The new curriculum includes GBUS 3953 Business, Society & Govt. as part of the core. Current data demonstrates that students are exceeding the desired level of outcomes for this measurement.

Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (p available data up to five years)	lease graph all
80% of the students must score at or higher than acceptable on a faculty-approved rubric.	Business Policy case analysis  Direct Summative Internal	Fall 2010: Consideratio n of stakeholders 40%  Ethical Solution 100%  Spring 2011: Consideratio n of stakeholders 30%  Ethical Solution 96%	Current data demonstrates that students are not meeting the desired level of outcomes for stakeholder consideration measurements.  Students are currently meeting or exceeding the desired outcome for the ethical solution measurements.  Further data collection is needed to determine if changes are needed	It is too early to determine if the ACBSP accreditation process and curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It will not be until AY 2012-13 that the graduating seniors will be under the new	Considered Stakeholders in Analys  90 80 70 60 50 40 30 20 10 Fall 2010 Spring 2011 Summer 2011  Proposed Ethical Solution	
		Summer 2011: Consideratio n of stakeholders 29% Ethical Solution 80%	for either of the outcomes.  Faculty added a case study that includes stakeholder analysis to the required Principles of Management course.  In Business Policy students are reminded of the importance of ethical considerations in case analyses.	curriculum	100 90 80 70 60 50 40 30 20 10 0 Fall 2010 Spring 2011 Summer 2011	

		I	PROGRAM GO	DALS FOR A	CCOUNTING MAJOR	
1. Each grad	luating student	should have	appropriate acc	counting softw	are skills.	
			of Results			
Performance Measure (Competency)	Description of Measurement Instrument  In ACCT	Areas of Success	Analysis and Action Taken This measure	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (pl available data up to five years)	ease graph all
students will score at or higher than acceptable on a faculty- approved rubric	A133 Accounting Information Systems students complete a computer software project with a written report  Direct Formative Internal	91% of the students met the standard	was instituted in AY 2010-11. Generally, ACCT 4133 is only offered once per year.  Although the goal was met in the first year, no general conclusions can be made with one data point. The DOB will need to see if a trend develops in the future.		92 90 88 86 84 82 80 78 76 74 AY 2010-11 AY 2011-12 AY 2012-13 AY 2013-14	

### PROGRAM GOALS FOR ACCOUNTING MAJOR Each graduating student should know the accounting standards of the accounting profession. **Analysis of Results** Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all Performance Description of Areas of Analysis and Results of Measure Measurement Success Action Taken Action Taken available data up to five years) (occurs in the (Competency) Instrument following year) Seeking ACBSP It is too early to Oklahoma A majority The pass 80 accreditation, determine if the of the CPA exam rates for curriculum changes **ACBSP** 70 students NWOSU as and course-level accreditation who took Direct reported by assessment are 60 process and the majority Summative the OSCPA actions taken to curriculum of their External are: 50 address this goal. changes have Accounting had an impact, NWOSU 40 classes from 2008 - 67%Regarding the as the **NWOSU** 2009-67% curriculum change, graduating **⊢**Goal 30 2010-46% Accounting majors students in who sit for 20 are now required to 2010-11 were CPA exam 2011-26% under the old take in 10 Governmental/Non curriculum. It Oklahoma -profit Accounting will not be until 0 will pass. AY 2012-13 and International 2008 2009 2010 2011 Accounting and an that the additional 3 hours graduating of upper level seniors will be Accounting under the new coursework. curriculum. Current data demonstrates a downward trend that resulted in not meeting the goal the past two years. Further data collection is needed to determine if additional changes are needed.

2. Each grad	luating studen	t should knov	v the accounting	standards of th	the accounting profession. (continued)
		Analysis	s of Results		· · · · · · · · · · · · · · · · · · ·
Performance Measure (Competency)  The Oklahoma CPA exam pass rate for students who took the majority of the Accounting classes from NWOSU will be at or above the	Description of Measurement Instrument  Oklahoma CPA exam  Direct Summative External Comparative			Results of the Action Taken (occurs in the following year) It is too early to determine if the ACBSP accreditation process and curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It will not be	Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all available data up to five years)  80  70  60  40  30  Mean
median pass rate for all Oklahoma, 4-year institutions.			-profit Accounting and International Accounting and an additional 3 hours of upper level Accounting coursework.  Current data demonstrates a downward trend that resulted in not meeting the goal this past year. Further data collection is needed to determine if additional changes are needed.	until AY 2012- 13 that the graduating seniors will be under the new curriculum.	2008 2009 2010 2011

# PROGRAM GOALS FOR ACCOUNTING MAJOR

3. Graduating students should know the code of conduct which is required by certifying bodies.

3. Graduatin	g students sho	ould know th	e code of condu	ect which is req	uired by certifying bodies. (continued)	
			of Results	1		
Performance Measure (Competency)	Description of Measurement Instrument  Oklahoma	Areas of Success The pass	Analysis and Action Taken Seeking ACBSP	Results of Action Taken (occurs in the following year) It is too early to	Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all available data up to five years)	
Oklahoma CPA exam pass rate for students who took the majority of the Accounting classes from NWOSU will be at or above the median pass rate for all Oklahoma public 4-year universities.	CPA exam  Direct Summative External Comparative	rates for NWOSU as reported by the OSCPA are: 2008 – 67% 2009-67% 2010-46% 2011-26%	accreditation, curriculum changes and course-level assessment are actions taken to address this goal.  Regarding the curriculum change, Accounting majors are now required to take Advanced Business Law/Ethics in which ½ of the class centers on professional conduct.  Current data demonstrates a downward trend that resulted in not meeting the goal the past two years. Further data collection is needed to determine if additional changes are needed.	determine if the ACBSP accreditation process and curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It will not be until AY 2012-13 that the graduating seniors will be under the new curriculum.	70 60 50 40 30 20 10 0 2008 2009 2010 2011	·U

# PROGRAM GOALS FOR BUSINESS ADMINISTRATION MAJOR

1. Graduating Business Administration majors, as a graduating class, will demonstrate a basic knowledge of the functional areas of accounting, business law, economics, finance, management and marketing.

		Analysis	of Results		
Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all available data up to five years)
75% of the students will score above the 50 <sup>th</sup> percentile on the Major Field Test in Business.	Major Field Test  Direct Summative External	Scores have remained fairly consistent over past five years. The scores have not been close to meeting target	As of 2010-11 the MFT was incorporated into Policy class. The MFT was worth 5% of the student's grade.  The historic MFT results were one factor in the decision to seek ACBSP accreditation.  The MFT scores and ACBSP accreditation process resulted in a significant change in the curriculum effective in Fall 2010.  Effective AY 2011-12, instituted course- level assessment to standardized learning outcomes for each course.	It is too early to determine if the ACBSP accreditation process, courselevel assessment and curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It will not be until AY 2012-13 that the graduating seniors will be under the new curriculum.  As for incorporating the MFT into a class, the impact was minimal at best. The percentage of the grade was increased to 10% in AY 2011-12.	80 70 60 50 40 30 20 10 2007 2008 2009 2010 2011

Graduating Business Administration majors, as a graduating class, will demonstrate a basic knowledge of the functional areas of accounting, business law, economics, finance, management and marketing, (continued)

The institution overall score will be above the median score of our identified peer institutions.    Direct Summative External Comparative institutions.   Spring 2011 - 150.1    -150.1   Summer curriculum to a more traditional Business curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It Effective AY 2010-11, instituted course-level assessment to standardized learning outcomes for each course.	154 152 150 148 146 144 142 140 Fall 2010 Spring Summer Fall 2011 2011

Graduating Business Administration majors, as a graduating class, will demonstrate a basic knowledge of the functional areas of accounting, business law, economics, finance, management and marketing. (continued) **Analysis of Results** Seek ACBSP Only 4 of In all 9 Major Field It is too early to 10 the 9 accreditation determine if the assessment Test 9 **ACBSP** indicators of measures Change accreditation 8 the MFT, the were at or Direct curriculum to a process, coursemean percent Summative above a 7 more traditional level correct should External mean Business assessment and 6 be 50 or percent curriculum curriculum NWOSU 5 higher. correct of changes have 4 50 or Incorporate MFT had an impact, ---Goal higher. into Business as the 3 Policy and have graduating 2 the MFT results students in However count toward the 2010-11 were 1 three other final grade. under the old 0 measures curriculum. It 2010-11 2011-12 were Effective AY will not be until between 2010-11. AY 2012-13 45-49% instituted coursethat the level assessment graduating to standardized seniors will be learning under the new outcomes for curriculum. each course. As for incorporating the MFT into a class, the impact was minimal at best. The percentage of the grade was increased to 10% in AY 2011-12.

Graduating Business Administration majors, as a graduating class, will demonstrate a basic knowledge of the functional areas of accounting, business law, economics, finance, management and marketing. (continued)

	w, economics, finance, man		Communication (Communication)		
In each of seven disciplines, 70% of the students will meet or exceed expectations in response to the statement "The team member demonstrate a clear understanding of principles."	MGMT 4433 simulation presentations  Direct Summative Internal  Spring 2011.  Spring 2011- 20% met the standard  Summer 2011 – 0% met the standard  (See Appendix 1)	Seek ACBSP accreditation  Change curriculum to a more traditional Business curriculum  Effective AY 2010-11, instituted course-level assessment to standardized learning outcomes for each course.  Starting in AY 2011-12 a case study was included in MGMT 3043 Principles of Management  Starting in AY 2012-13 a simulation will be included in MRKT 3063 Principles of Marketing.	It is too early to determine if the ACBSP accreditation process, courselevel assessment and curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It will not be until AY 2012-13 that the graduating seniors will be under the new curriculum.  It is too early to know if the MGMT 3043 case study has helped.	8 7 6 5 4 3 2 1 1 0 Spring 2011 Summer Fall 2011 2011	Actual Goal

# PROGRAM GOALS FOR BUSINESS ADMINISTRATION MAJOR

2. Graduating students should demonstrate the necessary skill to identify, conceptualize, diagnose, evaluate, and analyze business problems.

S GBIIICS.	b hi oniciiis.	A I '	. ( D			
		Analysis of				
Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (p available data up to five years)	lease graph all
80% of the students will score at least 20 points on the assessment rubric.	MGMT 4433 Case analysis  Direct Summative Internal	Students did not exceed 20% toward achieving the goal.  Fall 2010 – 20%  Spring 2011 – 13%  Summer 2011 – 0%	Seek ACBSP accreditation  Change curriculum to a more traditional Business curriculum  Effective AY 2010-11, instituted course-level assessment to standardized learning outcomes for each course.  Starting in AY 2011-12 a case study was included in MGMT 3043 Principles of Management  Starting in AY 2012-13 a simulation will be included in MRKT 3063 Principles of Marketing.	It is too early to determine if the ACBSP accreditation process, courselevel assessment and curriculum changes have had an impact, as the graduating students in 2010-11 were under the old curriculum. It will not be until AY 2012-13 that the graduating seniors will be under the new curriculum.  It is too early to know if the MGMT 3043 case study has helped.	90 80 70 60 50 40 30 20 10 0 Fall 2011 Spring 2011 Summer 2011	-Actual -Goal

PROGRAM GOALS FOR ORGANIZATIONAL LEADERSHIP MAJOR

1. Graduating students should be able to integrate prior work experience with complimentary knowledge of business principles grounded in an academic environment.

		Analysis	of Results		
Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all available data up to five years)
80% of the students will show at least a 50% reduction in errors from the pre-test.	A pretest will be administered in the first ORGL class – Foundations. A post-test will be administered in the final ORGL class – Capstone.  Direct Summative Internal	This goal, and thus this measure, began with AY 2010-11.  Therefore there has been no measurement yet, as no students have gone through the program having taken the pre-test.			

PROGRAM GOALS FOR ORGANIZATIONAL LEADERSHIP MAJOR

2. Graduating students should demonstrate the necessary skills to identify, conceptualize, diagnose, evaluate and analyze business problems.

proble	71115.				
		Analysis	of Results		
Performance Measure (Competency)  80% of the students will score at least	Description of Measurement Instrument  Students in ORGL 4553 Capstone will	Areas of Success  Only two NWOSU students in	Analysis and Action Taken  Too few students have been observed to	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 Years (please graph all available data up to five years)  100
80% on a faculty-approved assessment rubric.	perform a detailed case analysis  Direct Summative	the program have taken ORGL 4553 since this measure was adopted. Both	make any type of conclusion. We need to continue to monitor this measure.		90 80 70 60
	Internal	students took the class in Spring 2011			50 At or above 50th Percentile
		and exceeded the standard.			30
					20
					0
					O Soring Summer 2017

PROGRAM GOALS FOR TECHNICAL MANAGEMENT MAJOR

1. Graduating students should have added commentary knowledge of business principles to the skills gained from their career specialty.

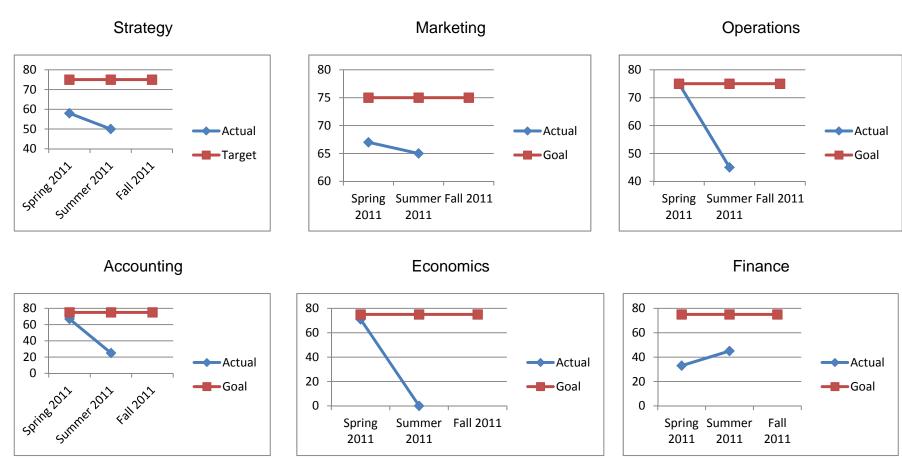
specia		A a l a ! a	of Decule			
			of Results			
Performance Measure (Competency)  80% of the	Description of Measurement Instrument  A pretest will	Areas of Success This goal,	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-5 available data up to five years	
students will show at least a 50% reduction in errors from the pre-test.	be administered by the program advisor before students take their first class in the program.  A post-test will be administered in the MGMT 4433 Business Policy.  Direct Summative Internal	and thus this measure, began with AY 2010-11.  Therefore there has been no measurement yet, as no students have gone through the program having taken the pre-test.			90 80 70 60 50 40 30 20 10 2011-122012-132013-142014-152015-16	** At or above 50th Percentile ** Target

# PROGRAM GOALS FOR TECHNICAL MANAGEMENT MAJOR

2. Graduating students should demonstrate the necessary skills to identify, conceptualize, diagnose, evaluate and analyze business problems.

proore				1		
		Analysis	of Results			
Performance Measure (Competency)	Description of Measurement Instrument	Areas of Success	Analysis and Action Taken	Results of Action Taken (occurs in the following year)	Insert Graphs or Tables of Resulting Trends for 3-available data up to five year	
80% of the students will score at least 20 points on a faculty-approved	Students in MGMT 4433 Business Policy will perform a detailed case	No Technical Management students have taken MGMT 4433 since this			90 80 70	
assessment rubric.	analysis  Direct  Summative	measure was adopted.			60	→ % At or above
	Internal				40	50th Percentile Target
					30	
					10	
					0 Fall 2010 Spring 2011 Summer 2011	

APPENDIX 1
Performance in each of the 7 disciplines reported from MGMT 4433 Simulation presentations



# **General Business**

