

Appendix D: Learning Goals, Objectives, Assessment Tools, Procedures and Results

Learning Goal	Objectives	Assessment Tools/Procedures	Results
Develop effective communication skills.	Student will use clear and concise communication in a professional speech.	CALS Dept of Communication will use rubrics to evaluate professional speech or oral presentation of business case study.	Collect samples in Spring 2009 AEM 4240 course to be evaluated during the Summer 2009.
	Student will demonstrate proficiency in written communication.	CALS Dept of Communication will use rubrics to evaluate professional paper on business topic.	
Attain analytical and functional competency in basic business and economics skills.	Student will demonstrate competency in the following 6 areas: economics, finance, accounting, marketing, management, statistics and economics.	Course embedded: achieve a grade of at least B in special test question in 3 of the following core: courses: finance, marketing, accounting, management, statistics, and economics.	Individual faculty take action to improve weak areas shown by the course embedded measures.
	Student will demonstrate proficiency in the use of information technology to select, manipulate and process data in a meaningful way in order to make business decisions.	Functional competency measured with ETS Major Field test in Business administered to 25% of seniors.	ETS test administered February 2008 with an average score of 176. Functional area score report reviewed by core faculty. Individual faculty take action to improve functional competencies in their respective disciplines. See ETS Test appendices. ETS test to be repeated every other year.
	Student will use software tools to solve accounting, financial and quantitative problems.	IT assessment test being investigated and development of IT course also under consideration.	Spring 2008 - Analytical competency measured in AEM 2100 (Intro Statistics) using conceptual assessment tools. See appendix AEM 2100 assessment results.
Develop the ability to apply ethical decision-making in both management and public-policy contexts.	Student will demonstrate competency in analysis of ethical problems in business or economics in both domestic and international contexts.	Written paper illustrating awareness of an ethical issue(s) and a framework for resolving will be evaluated with an appropriate rubric. New AEM course (Ethics in Business) being offered during the Spring 2009 semester. Course embedded assessment will be implemented in this class in the future.	AEM 3200 (Business Law) 20 point essay on the final exam is designed to evaluate student understanding of the role that ethics plays in maintain the proper balance in business decision-making. This essay will be randomly sampled and run through an ethical decision making rubric
Demonstrate the ability to solve practical business and economic-policy problems, both independently and as part of a team.	Student will be able to identify and analyze evidence pertaining to business and economics problems in society and communicate results.	Participate in case analysis and/or business counseling with a real world firm - which will be evaluated with rubric.	AEM 4240 (Management Strategy) capstone Accenture project individual work collected and assessed by external evaluators during Spring 2010 semester.
	Student will be able to work in a team to solve business and economic problems.	Track percentage of students participating in global experience.	
	Student will develop and awareness and understanding of the cultural issues that impact business operations in a global society.	Successfully solve computer assisted computer simulation on business issue. Analyze a marketing dilemma in another culture and foreign accounting/financial statements.	
Develop skills to be critical consumers of business and economic information and research.	Student will be able to demonstrate familiarity with major business and economics issues facing a firm and society.	Analyze financial statement analysis of spectrum of publicly help companies. Identify key metrics, ratios and performance measures.	AEM 2210 (Financial Accounting) Financial statement analysis class project will be assessed during Fall 2009 semester.
	Student will demonstrate ability to offer critical analysis of a variety of contemporary business issues.		

Example of AEM 1200

GOAL	Current Instructor Measure	Results	Action Next	Date to be completed
1) Develop effective communication skills	Optional Project Students have the opportunity to study, analyze, and <u>produce a team report</u> on a corporation publicly traded in the USA.	About 85-90% of students take advantage of this opportunity.	No plans for change	N/A
2) Attain analytical and functional competency in basic business skills	Three exams (two midterms and a final). <i>Topics covered:</i> Principles of business management, organizational behavior and theory, operations management, marketing, accounting and finance, strategic management, entrepreneurship and skills for success in business.	Level of attainment (C grade or better) around 85-90%.	No plans for change	N/A
3) Demonstrate working knowledge of ethics and ability to apply to real world settings	Syllabus includes two lectures on ethics (one straightforward and one on Corporate Social Responsibility and stakeholder model) and one lecture on diversity and business management. The material is tested in the exams.	NA	No plans for change	N/A
4) Demonstrate ability to solve practical business problems and make an impact in real world and society	Three exams (two midterms and a final). <i>Topics covered:</i> Principles of business management, organizational behavior and theory, operations management, marketing, accounting and finance, strategic management, entrepreneurship and skills for success in business. Guest Speakers Traditionally, AEM220 has had the participation of a number of high-profile guest speakers. The objective of this activity is to build a bridge between the information given in the course and real world application. CDO Assignment Students have the option to participate in activities lead by the CALS Career Development Office. This results in understanding of job search and application tasks, and of the importance of practical experience (ie. internships)	Level of attainment (C grade or better) around 85-90%.	Could have a <u>specific</u> evaluation component for guest speaker lectures.	TBD
5) Develop skills to be critical consumers of business information and research	Optional Project Students have the opportunity to study, analyze, and produce a team report on a corporation publicly traded in the USA. Participation in research Students are encouraged (through extra-credit opportunities) to take part as subjects in research studies. This allows for a view on the kind of insights research depends on.	About 85-90% of students take advantage of this opportunity.	No plans for change	

Example of AEM 2000

GOAL	Current Instructor Measure	Results	Action Next	Date to be completed
1) Develop effective communication skills	YES Executive briefing papers Peer editing Oral Presentations Impromptu position notes	<i>Over the past four years 95% or more of students enrolled in AEM 200 have demonstrated attainment of all learning outcomes.</i>		
2) Attain analytical and functional competency in basic business skills	MAYBE while students don't acquire specific technical skills in AEM 200, they do integrated analysis following a values-logic-evidence framework to arrive empirically and theoretically sound policy/strategy recommendations			
3) Demonstrate working knowledge of ethics and ability to apply to real world settings	YES Executive briefing papers Peer editing Oral Presentations Impromptu position notes			
4) Demonstrate ability to solve practical business problems and make an impact in real world and society	YES Executive briefing papers Oral presentations			
5) Develop skills to be critical consumers of business information and research	YES Executive briefing papers Peer editing Impromptu position notes <i>Much work on critical reading and thinking, in particular</i>			

Example of AEM 3230

GOAL	Current Instructor Measure	Results	Action Next	Date to be completed
1) Develop effective communication skills	At the end of the AEM 221/323 series, the student must complete a Financial Statement Analysis class project. Students have the responsibility to communicate the results of their analysis, in writing, to complete the assignment.		None	N/A
2) Attain analytical and functional competency in basic business skills	At the end of the AEM 221 course, as part of the final exam, students are given a group of comprehensive questions geared to judge how well they understand the basics of financial accounting.	The results of this testing showed a mean test grade of 83%.	Continue to deliver these comprehensive test questions and monitor the results from year to year.	Next testing Fall 2007.
3) Demonstrate working knowledge of ethics and ability to apply to real world settings	Currently, this material is embedded in the AEM 221/323 curriculum through the textbook chosen, assigned readings, case studies and lectures, with the topic covered on periodic exams during the semester. In the future, a specific course offering in Ethics in the Professions will be offered.		Assure that other AEM courses that embed ethics in the curriculum tie this back into the future course offering.	Spring 2008 or perhaps Fall 2008
4) Demonstrate ability to solve practical business problems and make an impact in real world and society	Yes, three 2 hour exams are completed by all of the class participants each semester.	Raw mean on these exams are generally around 80%, with a sizeable range between high and low scores.	No change expected.	N/A
5) Develop skills to be critical consumers of business information and research	1- Exam, as indicated in #4 above 2- With FSA project as described in #1 above.		I believe the FSA project will become a more prominent part of the course in the future.	Spring 2008

Example: Goal #1--Communication Rubric

Criteria	3 - Exemplary	2 - Proficient	1- Unacceptable
PURPOSE (CLAIM /THESIS)	Claim stated clearly, appropriate to purpose, audience and occasion; Substantive/ significant claim is well established / expressed.	Claim stated clearly; appropriate to purpose, audience and occasion; substance/ significance is established.	Claim not clear to the audience; purpose/ claim lacks clear appropriateness to audience or occasion; purpose/ claim lacks significance or is a previously known fact.
DEVELOPMENT OF IDEAS (CONTENT OR EVIDENCE)	Idea/s well developed; an abundance of examples and evidence clearly related to purpose; outstanding use of examples in support of claim.	Idea/s are developed; sufficient information, evidence, and examples that relate to purpose.	Superficial ideas presented without development; lack of sufficient examples and information/ evidence to support the purpose/claim.
COHERENCE	Unity achieved with introduction & conclusion; examples appropriate, clearly related, and logically presented; smooth transitions connect ideas.	Introduction and conclusion present, but may not clearly unify the presentation; examples appropriate and related to purpose; examples presented logically but sometimes lack transition.	Lacking clear introduction and conclusion that unifies the presentation; presentation is choppy and disjointed; examples are not clearly connected to the central purpose.
DELIVERY	Articulation clear; delivery outstanding for audience expectations (no reading or distracting vocalized pauses); media used to support claim; eye contact with audience exceptional; body language displays confidence and assists in making points.	Articulation clear (understandable; occasional vocalized pauses); delivery appropriate for expectations (little/no reading); media used for examples and supporting information most of the time; eye contact with audience good; body language does not distract.	Articulation not clear; vocalized pauses (um, well, like) distracting; delivery poor (refers to notes often, reads information); presentation dependent on media; eye contact with audience minimal or nonexistent; body language displays uneasiness and/or apprehension.

Incorporating Goals into Syllabi

AEM 210

Spring 2008

AEM Learning Goals

[~~Note~~]: Each core course should contribute to AEM's learning goals. How does this course contribute to the AEM's learning goals?

Please include the following statement in your syllabus: *[AEM has adopted learning goals that we hope each student achieves while getting a degree from our program. Each individual course will not cover all learning goals; however, through your program of study you should be able to improve your knowledge and skills across all learning goals.]*

Also, somewhere in your syllabus please insert the following table configured for you course.

AEM Learning Goals	This course contributes to the following AEM learning goals: <i>[Note: Indicate with checkmarks or an explanation for goals met by this course.]</i>
Develop effective communication skills	
Attain analytical and functional competency in basic business and economic skills	AEM 210 (Introductory Statistics) introduces the descriptive analysis of data (including regression and correlation), as well as inferential techniques such as estimation and hypothesis testing.
Demonstrate working knowledge of ethics and ability to apply to real world settings	The ethical presentation and collection of data is discussed throughout the course
Demonstrate ability to solve practical business and economic problems and make an impact in real world and society	Small data analysis cases are given throughout the class that give practice with writing statistical reports.
Develop skills to be critical consumers of business and economic information and research	Statistical literacy is an integral part of the class, and focus is given to being "informed consumers" of statistical information, as well as producers.

Other Assessment Methods

- External Major “field test”
 - Incentive to take for seniors
- Course-embedded

AEM Learning Goal 2 Assessment – Analytical competency in basic business and economic skills - AEM 2100, Introductory Statistics

One of AEM’s stated learning goals is to “attain analytical and functional competency in basic business and economic skills”. AEM 2100, Introductory Statistics, is designed to teach students basic data description techniques (tabular, numerical, and graphical summaries), introduce them to probability concepts, and present the foundations of statistical inference (estimation and hypothesis testing). As most students will use a statistical software package to analyze more complex data sets, in the past few years the focus has shifted from performing calculations to interpreting output. While there is still value in doing some basic computations, as students gain a better sense of what is being produced by the software, as the size of the data sets and the complexity of the methods increase, doing problems “by hand” is often an unrealistic exercise.

Therefore, in the past few years I have placed more emphasis on interpreting output, and preparing written descriptions. My philosophy is summed up in class by two phrases, “say it”, and “so what”. The former is intended to make sure students can write and verbalize their results, and the latter is intended to focus them on the contextual implications of the analyses they have performed.

For example, in past years when I wanted to test whether students could differentiate between a matched data set (such as twin studies) and two independent samples, I would give them a small data set and ask them to perform the appropriate analysis. Instead, in the past two years my final exam has included the following question:

Two Sample T-Test and Confidence Interval

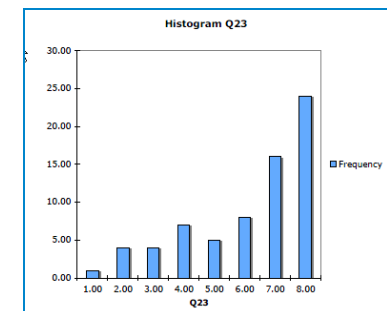
Two sample T for 1 vs 2

	N	Mean	StDev	SE Mean
1	10	102.8	73.4	23
2	10	101.6	76.6	24

95% CI for mu 1 - mu 2: (-69, 72)

T-Test mu 1 = mu 2 (vs not =): T = 0.04 P = 0.97 DF = 18

Both use Pooled StDev = 75.0



Lessons?

- Don't reinvent the wheel—borrow and customize
- External assessment validating (eg, field test)
- Benefits to program?
 - Probably
 - leads faculty to communicate
 - Leads to accreditation
 - Program/learning improvement in long run?
 - but too early to tell...