



# Program Analysis System (PAS)

August 21, 2012

*Where you belong!*

# Program Analysis System (PAS)

- What Is It?
- How Does It Work?
- Why Now?



# Program Analysis System (PAS)

- Every line of business, whether it be retail, manufacturing, service-oriented or education, needs a *consolidated* and *consistent* operational system to determine the good, the bad, and the ugly.
- Otherwise, we operate solely from intuition and what people have come to believe, rather than from facts and truth.



# Program Analysis System (PAS)

- Since our last HLC accreditation review, we have made a great deal of progress in our ability to make data-based decisions.
- The HLC identifies this as the foundation of an organization that is continually making improvements and enhancing quality.
- Academic program reviews have taken place with greater consistency, for example, and many of you have become familiar with the instructional cost study.



# Program Analysis System (PAS)

- Now we are going to provide you, on an annual basis, with the data you need in order to know the status of your programs so that you can continually make adjustments to keep your programs healthy and strong.
- PAS will allow you to make early corrections to problem areas and assist growth areas appropriately.
- PAS is an organized data structure centered around each functional area.



# Program Analysis System (PAS)

PAS gives you the information you need in order to undertake short- and long-run planning!



# Program Analysis System (PAS)

What does PAS require?

- PAS requires inquiry from both the quantitative approach and the qualitative approach.
- PAS as it applies to our University academic system will require inquiry into three layers of programming: Lower level discipline course work, Upper level discipline course work, and Graduate level discipline course work.



# Quantitative Component of PAS for Academic Programs

- Cost by Discipline Analysis (Trend and Current)
  1. Lower Division Cost Analysis by discipline\*
  2. Upper Division Cost Analysis by discipline\*
  3. Total Undergraduate Cost Analysis by discipline\*
  4. Graduate Cost Analysis by discipline\*

\*By Course Pre-Fix





# Quantitative Component of PAS for Academic Programs

- Enrollment by Discipline Analysis (Current and Trend)
  1. Enrollment by Categories Within Discipline\*
  2. Enrollment in Gate Way Course Within Discipline\*
  3. Graduating Majors Trend\*

\*By Discipline Course Pre-Fix



# Qualitative Component of PAS for Academic Programs

- Third Party System That Uses Student Perceptions vs. Faculty Perceptions
- Graduate Follow-up Data by Discipline
- Level and Type of Marketing by Discipline



# PAS

- Quantitative Example of PAS
  1. Made-up Example
  2. Definitions
  3. Data



# PAS

In order to avoid everyone trying to figure out whose data is up on the screen we have made up a list of courses we do not have and data that is not from one specific program. So all we want to look at is the concept, how we got to the numbers, and what it means.



# PAS – Cost Study

## **Programmatic Cost Study: Methodology and Definitions**

**The purpose of PAS is to gather data about the cost of academic programs across all instructional units using an average cost of instruction based on total costs of the University, not specific to a program.**

**PAS uses both direct costs and indirect costs that must be covered by tuition. The state appropriation no longer covers all indirect costs of the University so tuition must now pick up a portion of the indirect costs. The study helps to show if a program is covering a share on an average cost basis of both direct and indirect costs.**



# Public Accountability

With the new level of “Public Accountability” not on the doorstep, but already in the house we must not only have information for our own decision making, but information to demonstrate both our effective and efficient use of tax payer and student revenues.



# Data Definitions

## Column Headers

<b>Term:</b>	20103=2009 Fall	20113=2010 Fall	20123=2011 Fall
	20105=2010 Spring	20115=2010 Spring	20125=2012 Spr
<b>Sub:</b>	Subject Category (Course Pre-fix)		
<b>Crs#:</b>	Course Number		
<b>Level:</b>	LD = Lower Division	UD = Upper Division	
<b>Course Title:</b>	Course Title		
<b># Enr:</b>	Number of students enrolled, drops not included but withdrawals are included		
<b>CR:</b>	Credits per course		
<b>FYE:</b>	Full year equivalent = number of students enrolled multiplied by the credits per course divided by 30 credits		



# Data Definitions (cont.)

- Total Credits:** Number of students enrolled multiplied by credits per course
- Fac Load:** Faculty Load = credit load paid per course
- Cost per Credit:** Total cost per course includes direct costs and indirect costs that must be covered by tuition.

(Direct costs include faculty salaries/benefits, academic departmental operation costs, chair and administrative assistants salaries/benefits, academic departmental operating costs, chair and administrative assistants salary/benefits, library costs, tuition waivers and general fund scholarships. Indirect costs include all other expenses (non-academic staff salaries/benefits, utilities, maintenance, etc.). Only a portion of total indirect costs are included representing the declining state appropriations.





# Data Definitions (cont.)

**Tuition per Cr:** Tuition revenue is per course based on tuition rate per credit times total credits per course.

(The tuition rate is calculated as total fiscal year undergraduate tuition divided by total fiscal year undergraduate credits, not the per credit rate charged; banding creates a difference. College Now tuition is the actual amount of revenue received that term for those specific College Now courses.)

**Cost Variance:** Difference between Tuition per Course and Cost per Credit



# PAS vs. Instructional Costs from Allocation Model

- PAS includes indirect costs that must be covered by tuition
- PAS uses a university wide average cost rather than segregating costs by CIP
- PAS uses the cost per faculty load as an average for the University which evens the discrepancies of higher versus lower cost programs or for those programs that have all long term faculty versus a department that uses a lot of adjuncts and/or has relatively new faculty.



# Cost Analysis

## Data Example

### 2012 Course Review Epidemiology

Term	Sub	Crs #	Level	Course Title	# Enr	CR	FYE	Total Credits	Fac Load	Cost per Credit 4,642	Tuition per Cr 223	Cost Variance
<b>FALL</b>												
20123	EPID	100	LD	Introduction to Epidemiology	45	3	4.5	135	3	13,926	30,038	16,113
20123	EPID	120	LD	Introduction to Public Health	35	3	3.5	105	3	13,926	23,363	9,437
20123	EPID	250	LD	Introduction to Chronic Diseases	25	3	2.5	75	3	13,926	16,688	2,762
					105		10.5	315		41,777	70,089	28,312
20123	EPID	320	UD	Clinical & Diagnostic Microbiology	15	3	1.5	45	3	13,926	10,013	(3,913)
20123	EPID	350	UD	Scientific Writing: Epidemiologists	21	3	2.1	63	3	13,926	14,018	92
20123	EPID	400	UD	Reproductive Epidemiology	25	3	2.5	75	3	13,926	16,688	2,762
20123	EPID	450	UD	Globalization and Health	20	3	2.0	60	3	13,926	13,350	(575)
					81		8.1	243		55,703	54,069	(1,634)
20123	EPID	College Now		# of Locations Served	10		17.7	531	0.75	34,814	35,207	392
<b>20123</b>	<b>EPID</b>			<b>Fall Program Totals</b>	<b>186</b>		<b>36.3</b>	<b>1,089</b>		<b>132,295</b>	<b>159,365</b>	<b>27,070</b>



# Cost Analysis

## 2012 Course Review Epidemiology

Term	Sub	Crs #	Level	Course Title	# Enr	CR	FYE	Total Credits	Fac Load	Cost per Credit 4,642	Tuition per Cr 223	Cost Variance		
<b>SPRING</b>														
20125	EPID	100	LD	Introduction to Epidemiology	40	3	4.0	120	3	13,926	26,701	12,775		
20125	EPID	120	LD	Introduction to Public Health	35	3	3.5	105	3	13,926	23,363	9,437		
20125	EPID	250	LD	Introduction to Chronic Diseases	30	3	3.0	90	3	13,926	20,026	6,100		
20125	EPID	270	LD	Molecular Laboratory Techniques	20	3	2.0	60	3	13,926	13,350	(575)		
					125		12.5	375		55,703	83,440	27,737		
20125	EPID	420	UD	Genetics in Public Health	15	3	1.5	45	3	13,926	10,013	(3,913)		
20125	EPID	490	UD	Senior Seminar	13	3	1.3	39	3	13,926	8,678	(5,248)		
					28		2.8	84		27,852	18,691	(9,161)		
20125	EPID	<b>Spring Program Totals</b>			<b>153</b>		<b>15.3</b>	<b>459</b>		<b>83,555</b>	<b>102,130</b>	<b>18,576</b>		
					<b>FY</b>									
					<b>2012 Epidemiology</b>			<b>339</b>		<b>1,548</b>		<b>215,850</b>	<b>261,495</b>	<b>45,646</b>



# Enrollment Demographics

## Major Enrollment Demographics by:

**Term**

**Gender**

**Race**

**Class**

**FT/PT**

**Degrees Awarded**

**Ave. ACT**

**Ave. Age**

**Ave. GPA**



# What Next?

Each Department Chair has been given cost and enrollment information by discipline (by course pre-fix). With this information you can see trend lines for both costs and enrollment information. Given this is a first time venture we know some errors may be present so please pass the information through Department Chairs to the Deans. When fully implemented this will enable individual programs to have a continuous improvement model that compliments the program reviews completed currently. After lunch we will have time to have a question and answer session once you have had a first look at the data.

