

# Blackboard<sup>®</sup>

## Cost of Instruction: Determining the True Cost to Deliver Education



# Agenda

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**1** Market Trends & Opportunities

**2** Our Solution: Cost of Instruction

**3** Demonstration

**4** Q & A

# **Market Trends & Opportunities**

**Mike Lovell**

Product Marketing

**Blackboard**

# New Challenges for Higher Education

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- Stagnant Enrollments
- Limited Resources
- Declining Revenue
- Student Retention
- Indeterminable Costs



# Making the Case for Cost of Instruction

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## Colleges Hard-Pressed to Explain Variations in Price

*By Eric Kelderman*



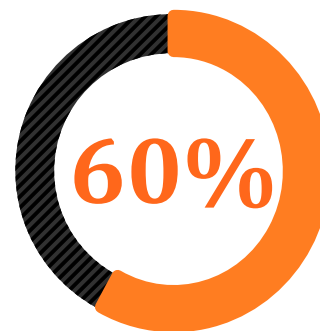
## Cost Structure of Post-Secondary Education

# Making the Case for Cost of Instruction

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“We’ve faced increasing costs, for faculty, staff, **instructional resources** and other expenses – it’s forced us to take a step back...and think about how we can do business better.”

*Dr. Sadie Gregory, Provost, VP of Academic Affairs, Coppin State University*



schools have **expenses outpacing revenue**



schools with **downgraded credit**

# **Our Solution: Cost of Instruction**

**Lynne Culverhouse**  
Senior Consultant

**Blackboard**

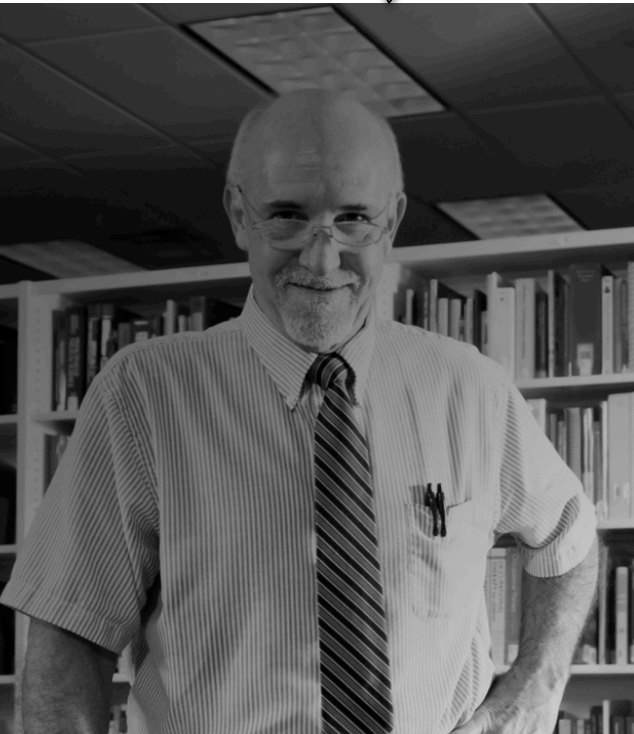
# You Might Be Asking, Hearing, or Thinking...

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Do instructional costs influence our strategic direction?

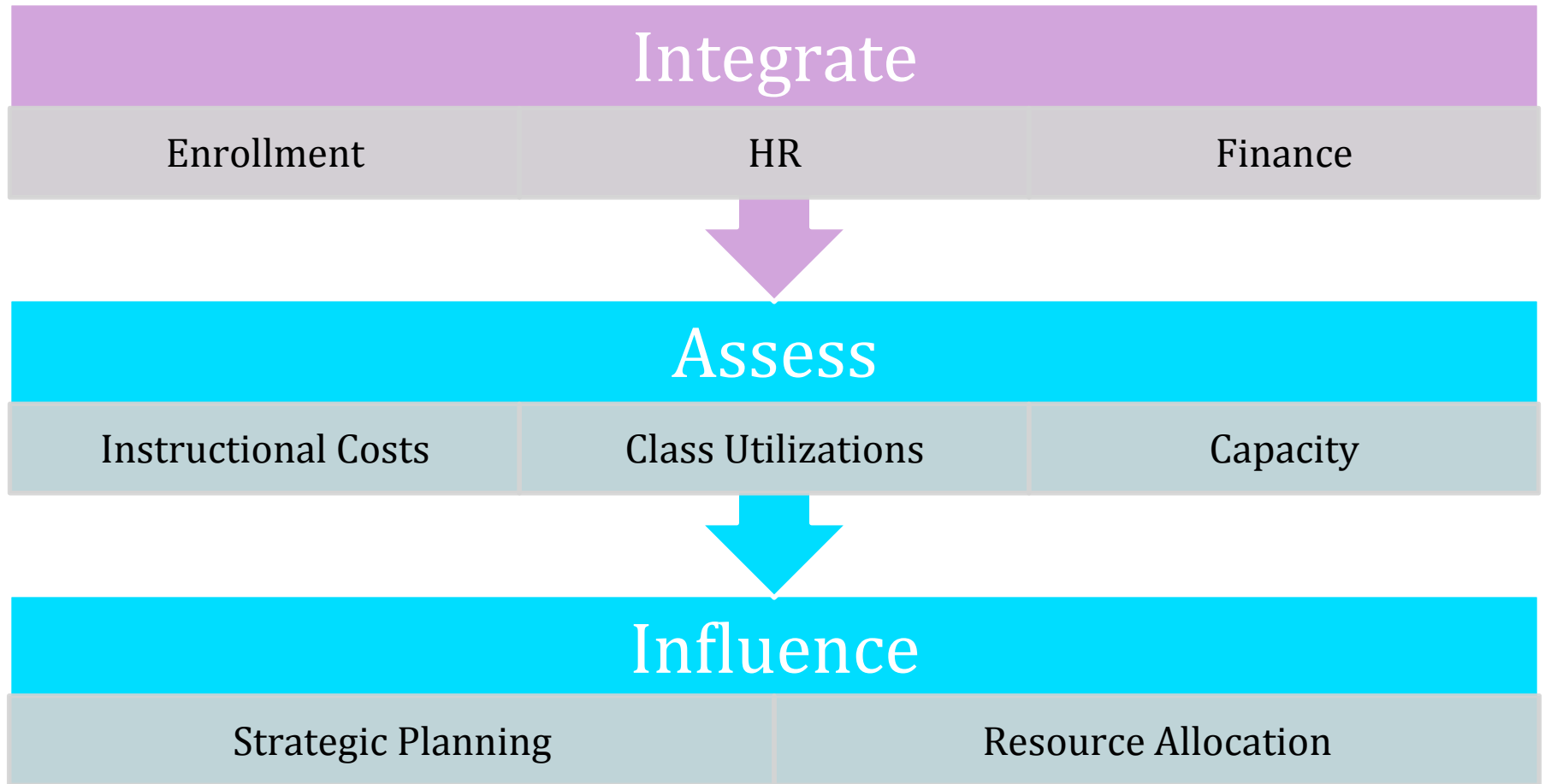
What is the effectiveness of our programs?

Can we operate more efficiently?



# Our Solution: Cost of Instruction Overview

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# Our Solution: Cost of Instruction Principles

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**Built on the Foundation of Blackboard Analytics  
(Student Management)**

**Analysis Based at Course and Student Level Rolling Up to Program,  
Department, and School**

**On-Going Operational Model**

**Currently, Not Full-Cost Model**

**Does Not Measure Academic Quality**

# Our Delivery: Two Distinct Phases

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Phase I:

**Process Review &  
Technical Deployment**

Phase II:

**Strategic Analysis &  
Recommendations**

# **Phase I: Process Review & Technical Deployment**

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Review of ERP System & Business Practices

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Implementation of Baseline COI Framework

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Customization of Framework

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Data Validation & Support



## **Phase II: Strategic Analysis & Recommendations**

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Analysis of Information Provided By COI Model

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Alignment of COI with Institutional Goals

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Customization & Extension Needs Identified

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Deliver Recommendations to Leadership


# Demo

**Steve Grantham**  
Senior Consultant

**Blackboard**

# How This Works

## Instructional Costs by Course Department


**Term**  
**Fall 2012**

	Section Count - CSF	Class Enrolled Count	Course Utilization % - CSF	Class Revenue	Class Total Cost	Class Margin	Margin % - CSF
Interdisciplinary Studies (IDS)	5	47	36.15 %	\$22,911.11	\$9,792.01	\$13,119.10	57.26 %
Health, PhysicalEd, Recr&Dance (HPERD)	61	1,053	72.52 %	\$466,284.61	\$245,218.14	\$219,978.54	47.18 %
Humanities (HUMANITIES)	84	1,664	90.09 %	\$829,444.43	\$541,156.03	\$273,280.25	32.95 %
Hist, Geog & Global Studies (HGEOGGBL)	60	1,159	77.01 %	\$607,159.69	\$441,647.41	\$158,168.94	26.05 %
Appl Psyc & Rehab Counseling (APPPSYREH)	104	1,543	74.72 %	\$940,942.76	\$733,274.59	\$207,668.17	22.07 %
Social Sci & Human Serv Admin (SOCIALSCI)	47	782	62.36 %	\$377,030.53	\$294,704.94	\$82,325.59	21.84 %
Criminal Justice (CRMNLJUSTC)	30	597	70.57 %	\$337,271.71	\$266,543.78	\$70,727.93	20.97 %
Acct, Managerial Econ & Fin (AMEF)	22	460	75.91 %	\$232,274.05	\$187,106.20	\$45,167.85	19.45 %
Natural Sciences (NATURALSCI)	98	1,822	79.88 %	\$615,753.18	\$529,448.80	\$85,916.26	13.95 %
Visual & Performing Arts (VISUALARTS)	62	936	71.40 %	\$459,145.17	\$445,675.00	\$13,185.52	2.87 %
Social Work (SOCIALWORK)	22	399	86.55 %	\$217,151.76	\$213,135.25	\$4,016.51	1.85 %
All Academic Orgs	936	15,527	72.98 %	\$7,723,014.08	\$7,564,780.45	\$33,767.93	0.44 %
Mgmt Sci & Mgmt Info Systems (MNSCMISY)	35	583	74.27 %	\$292,269.88	\$300,643.21	(\$8,373.33)	-2.86 %
Math & Computer Science (MATHCOMPSC)	67	1,145	76.59 %	\$657,023.30	\$713,964.09	(\$56,940.79)	-8.67 %
School of Education (ED)	16	229	54.65 %	\$151,528.61	\$197,769.18	(\$46,240.57)	-30.52 %
Orientation (ORIE)	25	571	97.44 %	\$98,770.87	\$74,929.95	(\$36,653.73)	-37.11 %
College of Health Professions (NURS)	102	1,693	80.01 %	\$971,441.50	\$1,366,581.19	(\$409,338.54)	-42.14 %
Management & Marketing (MGMTMKTG)	24	431	65.30 %	\$206,835.79	\$315,943.15	(\$109,107.36)	-52.75 %
Curriculum & Instruction (CURR&INSTR)	34	199	31.69 %	\$132,698.63	\$309,279.07	(\$176,580.44)	-133.07 %
Special Education (SPECIALED)	13	90	32.61 %	\$59,512.16	\$256,028.44	(\$197,831.03)	-332.42 %
Adult & Genl Education (ADULTGENED)	6	27	19.29 %	\$23,570.00	\$121,940.02	(\$98,720.94)	-418.84 %

# How This Works

## Instructional Costs by Course Department


**Term**

**Fall 2012**

	Margin % - CSF	Revenue per Class Enrollment - CSF	Cost per Class Enrollment - CSF	Margin per Class Enrollment - CSF
Interdisciplinary Studies (IDS)	57.26 %	\$487.47	\$208.34	\$279.13
Health, PhysicalEd, Recr&Dance (HPERD)	47.18 %	\$442.82	\$232.88	\$208.91
Humanities (HUMANITIES)	32.95 %	\$498.46	\$325.21	\$164.23
Hist, Geog & Global Studies (HGEOGGBL)	26.05 %	\$523.87	\$381.06	\$136.47
Appl Psyc & Rehab Counseling (APPPSYREH)	22.07 %	\$609.81	\$475.23	\$134.59
Social Sci & Human Serv Admin (SOCIALSCI)	21.84 %	\$482.14	\$376.86	\$105.28
Criminal Justice (CRMNLJUSTC)	20.97 %	\$564.94	\$446.47	\$118.47
Acct, Managerial Econ & Fin (AMEF)	19.45 %	\$504.94	\$406.75	\$98.19
Natural Sciences (NATURALSCI)	13.95 %	\$337.95	\$290.59	\$47.15
Visual & Performing Arts (VISUALARTS)	2.87 %	\$490.54	\$476.15	\$14.09
Social Work (SOCIALWORK)	1.85 %	\$544.24	\$534.17	\$10.07
All Academic Orgs	0.44 %	\$497.39	\$487.20	\$2.17
Mgmt Sci & Mgmt Info Systems (MNSCMISY)	-2.86 %	\$501.32	\$515.68	(\$14.36)
Math & Computer Science (MATHCOMPSC)	-8.67 %	\$573.82	\$623.55	(\$49.73)
School of Education (ED)	-30.52 %	\$661.70	\$863.62	(\$201.92)
Orientation (ORIE)	-37.11 %	\$172.98	\$131.23	(\$64.19)
College of Health Professions (NURS)	-42.14 %	\$573.80	\$807.20	(\$241.78)
Management & Marketing (MGMTMKTG)	-52.75 %	\$479.90	\$733.05	(\$253.15)
Curriculum & Instruction (CURR&INSTR)	-133.07 %	\$666.83	\$1,554.17	(\$887.34)
Special Education (SPECIALED)	-332.42 %	\$661.25	\$2,844.76	(\$2,198.12)
Adult & Genl Education (ADULTGENED)	-418.84 %	\$872.96	\$4,516.30	(\$3,656.33)

# How This Works

## Taking a Closer Look at Nursing



Term

Fall 2012

	Section Count - CSF	Class Enrolled Count	Course Utilization % - CSF	Class Revenue	Class Total Cost	Class Margin	Margin % - CSF
College of Health Professions (NURS)	102	1,693	80.01 %	\$971,441.50	\$1,366,581.19	(\$409,338.54)	-42.14 %
Management & Marketing (MGMTMKTG)	24	431	65.30 %	\$206,835.79	\$315,943.15	(\$109,107.36)	-52.75 %
Curriculum & Instruction (CURR&INSTR)	34	199	31.69 %	\$132,698.63	\$309,279.07	(\$176,580.44)	-133.07 %
Special Education (SPECIALED)	13	90	32.61 %	\$59,512.16	\$256,028.44	(\$197,831.03)	-332.42 %
Adult & Genl Education (ADULTGENED)	6	27	19.29 %	\$23,570.00	\$121,940.02	(\$98,720.94)	-418.84 %



		Section Count - CSF	Class Enrolled Count	Course Utilization % - CSF	Class Revenue	Class Total Cost	Class Margin	Margin % - CSF
All Class Numbers	All Instruction Modes	102	1,693	80.01 %	\$971,441.50	\$1,366,581.19	(\$409,338.54)	-42.14 %
	World Wide Web	13	302	97.42 %	\$136,714.37	\$148,589.32	(\$11,874.95)	-8.69 %
	In Person	89	1,391	77.02 %	\$834,727.13	\$1,217,991.87	(\$397,463.59)	-47.62 %
Health Information Management (HIM)	All Instruction Modes	9	187	95.41 %	\$72,964.62	\$73,630.23	(\$665.61)	-0.91 %
	World Wide Web	4	103	98.10 %	\$45,557.49	\$37,043.43	\$8,514.06	18.69 %
	In Person	5	84	92.31 %	\$27,407.13	\$36,586.80	(\$9,179.67)	-33.49 %
Health Sciences (HSC)	All Instruction Modes	9	150	96.77 %	\$78,141.97	\$118,906.92	(\$41,238.67)	-52.77 %
	World Wide Web	4	88	97.78 %	\$45,345.32	\$64,158.18	(\$18,812.86)	-41.49 %
	In Person	5	62	95.38 %	\$32,796.65	\$54,748.74	(\$22,425.81)	-68.38 %
Nursing (NURS)	All Instruction Modes	84	1,356	76.83 %	\$820,334.91	\$1,174,044.04	(\$367,434.26)	-44.79 %
	World Wide Web	5	111	96.52 %	\$45,811.56	\$47,387.71	(\$1,576.15)	-3.44 %
	In Person	79	1,245	75.45 %	\$774,523.35	\$1,126,656.33	(\$365,858.11)	-47.24 %



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# How This Works

## Taking a Closer Look at Nursing



Term

Fall 2012

	Section Count - CSF	Class Enrolled Count	Course Utilization % - CSF	Class Revenue	Class Total Cost	Class Margin	Margin % - CSF	R
HIM 305	1	29	96.67 %	\$9,879.99	\$6,739.83	\$3,140.16	31.78 %	
HIM 412	1	30	100.00 %	\$15,065.42	\$10,801.44	\$4,263.98	28.30 %	
HIM 301	1	25	100.00 %	\$12,120.00	\$10,801.44	\$1,318.56	10.88 %	
HIM 402	1	19	95.00 %	\$8,492.08	\$8,700.72	(\$208.64)	-2.46 %	
NURS 210	3	61	93.85 %	\$30,078.89	\$26,900.25	\$3,178.64	10.57 %	
NURS 318	2	50	100.00 %	\$15,732.67	\$20,487.46	(\$4,754.79)	-30.22 %	
HSC 101	1	18	90.00 %	\$9,594.50	\$10,801.44	(\$1,206.94)	-12.58 %	
HSC 190	2	47	104.44 %	\$25,697.72	\$29,270.37	(\$3,572.65)	-13.90 %	
HSC 312	1	23	92.00 %	\$10,053.10	\$24,086.37	(\$14,033.27)	-139.59 %	

# How This Works

## Comparison Across Terms



Academic Org

All Academic Orgs

		Section Count - CSF	Class Enrolled Count	Course Utilization % - CSF	Class Revenue	Class Total Cost	Class Margin	Margin % - CSF
Fall 2010	Fall	1,011	16,253	70.80 %	\$8,628,547.76	\$9,215,152.80	(\$647,862.20)	-7.51 %
Winter 2011	Winter	48	320	33.06 %	\$232,516.83	\$204,398.60	\$27,464.73	11.81 %
Spring 2011	Spring	1,001	15,035	66.29 %	\$7,821,702.83	\$8,871,783.77	(\$1,191,176.37)	-15.23 %
Summer I 2011	Summer	208	2,343	49.69 %	\$898,339.43	\$292,844.02	\$319,022.80	35.51 %
Summer II 2011	Summer	26	189	29.49 %	\$115,347.62	\$61,030.53	\$12,042.80	10.44 %
Fall 2011	Fall	949	15,625	71.10 %	\$7,983,152.67	\$9,338,206.83	(\$1,593,775.19)	-19.96 %
Winter 2012	Winter	48	331	31.49 %	\$222,120.33	\$71,742.68	\$51,523.48	23.20 %
Spring 2012	Spring	996	14,786	66.00 %	\$7,222,748.95	\$8,647,883.56	(\$1,792,323.69)	-24.81 %
Summer I 2012	Summer	182	1,910	46.16 %	\$805,625.90	\$116,629.56	\$246,730.28	30.63 %
Summer II 2012	Summer	22	193	40.80 %	\$114,616.32	\$33,444.49	\$17,843.06	15.57 %
Fall 2012	Fall	936	15,534	73.02 %	\$7,701,291.32	\$8,231,011.20	(\$653,857.72)	-8.49 %
Winter 2013	Winter	37	215	27.71 %	\$161,052.16	\$59,878.13	\$88,206.72	54.77 %
Spring 2013	Spring	925	13,964	69.76 %	\$6,811,572.40	\$7,809,958.84	(\$1,084,720.91)	-15.92 %
Summer I 2013	Summer	161	1,594	46.07 %	\$916,098.67	\$258,992.33	\$609,084.40	66.49 %
Summer II 2013	Summer	30	172	31.62 %	\$106,923.84	\$65,727.48	\$30,033.16	28.09 %



# How This Works

## Comparison Across Terms



Academic Org

All Academic Orgs

		Section Count - CSF	Class Enrolled Count	Course Utilization % - CSF	Class Revenue	Class Total Cost	Class Margin	Margin % - CSF
Fall	Fall 2010	1,011	16,253	70.80 %	\$8,628,547.76	\$9,215,152.80	(\$647,862.20)	-7.51 %
	Fall 2011	949	15,625	71.10 %	\$7,983,152.67	\$9,338,206.83	(\$1,593,775.19)	-19.96 %
	Fall 2012	936	15,534	73.02 %	\$7,701,291.32	\$8,231,011.20	(\$653,857.72)	-8.49 %
Spring	Spring 2011	1,001	15,035	66.29 %	\$7,821,702.83	\$8,871,783.77	(\$1,191,176.37)	-15.23 %
	Spring 2012	996	14,786	66.00 %	\$7,222,748.95	\$8,647,883.56	(\$1,792,323.69)	-24.81 %
	Spring 2013	925	13,964	69.76 %	\$6,811,572.40	\$7,809,958.84	(\$1,084,720.91)	-15.92 %
Summer	Summer I 2011	208	2,343	49.69 %	\$898,339.43	\$292,844.02	\$319,022.80	35.51 %
	Summer II 2011	26	189	29.49 %	\$115,347.62	\$61,030.53	\$12,042.80	10.44 %
	Summer I 2012	182	1,910	46.16 %	\$805,625.90	\$116,629.56	\$246,730.28	30.63 %
	Summer II 2012	22	193	40.80 %	\$114,616.32	\$33,444.49	\$17,843.06	15.57 %
	Summer I 2013	161	1,594	46.07 %	\$916,098.67	\$258,992.33	\$609,084.40	66.49 %
	Summer II 2013	30	172	31.62 %	\$106,923.84	\$65,727.48	\$30,033.16	28.09 %
Winter	Winter 2011	48	320	33.06 %	\$232,516.83	\$204,398.60	\$27,464.73	11.81 %
	Winter 2012	48	331	31.49 %	\$222,120.33	\$71,742.68	\$51,523.48	23.20 %
	Winter 2013	37	215	27.71 %	\$161,052.16	\$59,878.13	\$88,206.72	54.77 %



# How This Works

## Costs and Revenues by Student Level



**Term**

**Fall 2012**

	Distinct Students - RF	Adjusted Student Credit Hours	Avg Credits per Student - RF	Student Instructional Revenue	Student Instructional Cost	Student Margin	Margin % - RF
All Academic Levels	3,642	43,978.00	12.08	\$7,723,014.08	\$7,564,781.60	\$33,766.78	0.44 %
Undergraduate	3,149	41,023.00	13.03	\$6,895,578.07	\$6,270,910.10	\$513,579.72	7.45 %
Freshman	1,002	13,622.00	13.59	\$2,323,736.82	\$1,357,893.30	\$895,766.36	38.55 %
Sophomore	606	8,095.00	13.36	\$1,310,560.89	\$1,095,313.98	\$208,446.45	15.91 %
Junior	672	8,644.00	12.86	\$1,439,789.82	\$1,373,391.14	\$53,363.44	3.71 %
Senior	826	10,147.00	12.28	\$1,728,410.11	\$2,301,597.56	(\$592,614.38)	-34.29 %
Post-Bacc Undergraduate	43	515.00	11.98	\$93,080.43	\$142,714.12	(\$51,382.15)	-55.20 %
Graduate	493	2,955.00	5.99	\$827,436.01	\$1,293,871.50	(\$479,812.94)	-57.99 %
Graduate	493	2,955.00	5.99	\$827,436.01	\$1,293,871.50	(\$479,812.94)	-57.99 %

# How This Works

## Costs and Revenues by Major



Term		Plan Type		Career			
Fall 2012		Major		Undergraduate			
		Distinct Students - RF	Student Instructional Revenue	Student Instructional Cost	Student Margin	Margin % - RF	
College of Health Professions	Allied Health Sciences (AHLTHSCIBS)	11	\$22,439.95	\$19,143.32	\$3,058.28	13.63 %	
	Health Information Management (HIMBS)	127	\$268,420.47	\$273,739.69	(\$8,297.99)	-3.09 %	
	BS in Nursing Generic (NURSBSN)	247	\$550,701.70	\$683,319.26	(\$145,452.87)	-26.41 %	
	BS in Nursing Registered (NURSRNBSN)	48	\$123,172.39	\$182,913.87	(\$59,741.48)	-48.50 %	
	BSN Accelerated (NURSBSNSD)	15	\$44,659.55	\$135,174.16	(\$92,599.40)	-207.35 %	
	BSN Registered Accelerated (NURSRNBSNA)	1	\$2,430.53	\$9,077.62	(\$6,768.12)	-278.46 %	
Criminal Justice	BS in Criminal Justice (CRJUBS)	272	\$613,795.11	\$426,883.94	\$179,083.52	29.18 %	
Curriculum & Instruction	BS in Early Childhood Educ (ECEDBS)	57	\$107,414.23	\$233,946.25	(\$127,143.33)	-118.37 %	
	BS in Elementary Education (ELEDBS)	24	\$43,476.84	\$71,578.21	(\$28,956.82)	-66.60 %	
Health, PhysicalEd, Recr&Dance	BS in Dance (DANCEBS)	3	\$9,657.03	\$12,741.57	(\$3,367.72)	-34.87 %	
Hist, Geog & Global Studies	BA in Global Studies (GLSTBA)	11	\$22,949.90	\$69,502.27	(\$46,854.60)	-204.16 %	
	BA in History (HISTBA)	9	\$18,952.22	\$23,953.47	(\$5,187.39)	-27.37 %	
	BS in Geography (GEOGBS)	1	\$4,816.00	\$3,622.59	\$1,193.41	24.78 %	
	BS in History (HISTBS)	26	\$57,939.05	\$148,285.85	(\$91,784.54)	-158.42 %	
Humanities	BA in English (ENGLBA)	31	\$72,174.18	\$71,301.33	(\$62.38)	-0.09 %	
	BS in English (ENGLBS)	5	\$9,236.00	\$9,541.51	(\$305.51)	-3.31 %	
Interdisciplinary Studies	Interdisciplinary Studies (IDSBS)	71	\$141,006.34	\$149,880.99	(\$9,440.15)	-6.69 %	

# How This Works

## Course Cost for 3 Selected Major Departments



**Term**  
 Fall 2012

**Plan Type**  
 Major

**Career**  
 Undergraduate

**Measures**  
 Student Instructional Cost

	Appl Psyc & Rehab Counseling	College of Health Professions	Curriculum & Instruction
Acct, Managerial Econ & Fin (AMEF)	\$3,049.37	\$6,870.68	\$766.20
Appl Psyc & Rehab Counseling (APPPSYREH)	\$190,919.44	\$4,358.08	\$1,430.95
College of Health Professions (NURS)	\$3,111.54	\$1,114,104.08	
Criminal Justice (CRMNLJUSTC)	\$3,684.66	\$810.11	
Health, PhysicalEd, Recr&Dance (HPERD)	\$12,439.09	\$9,375.96	\$638.16
Hist, Geog & Global Studies (HGEOGGBL)	\$20,842.55	\$8,131.57	\$13,590.36
Humanities (HUMANITIES)	\$26,637.47	\$21,155.97	\$17,045.38
Management & Marketing (MGMTMKTG)	\$1,161.63	\$31,235.31	\$12,889.40
Math & Computer Science (MATHCOMPSC)	\$22,726.67	\$16,174.64	\$15,180.46
Mgmt Sci & Mgmt Info Systems (MNSCMISY)	\$5,284.70	\$29,073.45	\$3,421.10
Natural Sciences (NATURALSCI)	\$21,040.48	\$22,335.83	\$3,872.86
Orientation (ORIE)	\$815.40	\$8,238.95	\$181.35
School of Education (ED)			\$24,148.03
Social Sci & Human Serv Admin (SOCIALSCI)	\$25,127.30	\$2,630.46	\$2,776.51
Social Work (SOCIALWORK)	\$3,539.66	\$950.22	\$1,808.13
Visual & Performing Arts (VISUALARTS)	\$40,264.00	\$18,017.03	\$2,870.47

# Cost of Instruction

**Learn More:**

**<http://bbbb.blackboard.com/CostOfInstructionVideo>**