

Academic Prioritization Curricular Metrics - Undergraduate Programs

Mathematics

Section One: History of the Program and Consistency with University Mission

Criteria	Indicators	Response (200 word limit)
History of the Program	Describe why and when the program was established. How and why has the program evolved over the years?	
Consistency with Mission and Strategic Direction	Describe how the program supports the PLNU mission and strategic direction.	

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Section Two: External and Internal Demand for the Program

Criteria	Indicators	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Comments (200 word limit for each comment)	
External Demand	FTF App Conversion Rate (Completed Apps/Inquiries)	MATH PLNU*	22.3% 19.2%	32.1% 26.4%	21.2% 24.0%	18.0% 23.4%	12.8% 21.4%	19.1% 20.5%	What does this collection of data say about the external demand for your Program?
	FTF Admission Rate (Admits/Completed Apps)	MATH PLNU*	91.3% 83.5%	92.3% 87.0%	96.4% 72.4%	95.5% 68.2%	91.3% 67.8%	81.5% 69.1%	
	FTF Yield (Enrolled/Admits)	MATH PLNU*	33.3% 37.2%	25.0% 27.5%	37.0% 29.4%	28.6% 26.5%	28.6% 29.2%	9.1% 31.6%	
	Noel-Levitz High School Market Demand Share	Below PLNU Median						1.3%	
	Noel-Levitz PLNU Share of Regional Deg Awd	Below PLNU Median						1.0%	
Internal Demand	Share of PLNU Undergrad Headcount	MATH	1.5%	1.2%	1.3%	1.2%	1.1%	0.9%	What does this data say about the internal demand for your program?
	Indicators		2010-11		2011-12		2012-13		
	Share of PLNU UG Units Taught	MATH	5.4%		5.2%		5.3%		
	Based on some of PLNU's academic initiatives (e.g. expanding number of traditional undergraduate students, programs for new types of learners, expanding and creating new graduate programs, etc.), what new demands do you expect to be placed on your program?								
Professional Trends for Graduates	Look at the provided resources about fast growing areas of employment in the next decade. Which of these professions could be occupied by students majoring in your program?								
	What changes could you make in your program that would better prepare your graduates for these professions?								

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Three: Quality of Program Inputs

Criteria	Indicators	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Comments (200 word limit for each comment)
Incoming Student Data (First-Time Freshmen)	Average SAT	MATH	1267	1198	1171	1222	1268	What does this data say about the quality of the students entering your program?
	Composite Score	PLNU*	1140	1125	1147	1150	1168	
	Average SAT	MATH	607	566	553	570	607	
	Reading Score	PLNU*	565	561	573	572	583	
	Average SAT	MATH	660	632	618	652	662	
	Math Score	PLNU*	575	564	574	578	585	
Incoming Student Data (First-Time Freshmen)	Average High School GPA	MATH	3.98	4.02	3.82	3.89	4.00	
		PLNU*	3.73	3.70	3.74	3.77	3.81	
Faculty	Percent of full-time faculty with a terminal degree					Total MICS Dept	100.0%	
	Summarize the most recent scholarly and creative activities of the faculty in this program. If desired, include information about peer reviewed scholarship.							
	Summarize the grants received by the faculty.							
	Describe how the scholarly and creative activities of the faculty impact the program.							
	What are the faculty in the program doing to learn about and use the best teaching practices in their discipline?							
Program Support	Describe the current quality of the holdings/facilities/equipment needed to execute this program.							

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Four: Quality of Program Outcomes

Criteria	Indicators	F07 Coh	F08 Coh	F09 Coh	F10 Coh	F11 Coh	F12 Coh	Comments (200 word limit for each comment)	
Student Data	One-Year Retention	MATH	81.8%	87.5%	100.0%	83.3%	66.7%	83.3%	What does this student data say about the quality of your program?
		PLNU*	84.8%	86.1%	86.3%	84.9%	85.8%	90.8%	
	Indicators		F02 Coh	F03 Coh	F04 Coh	F05 Coh	F06 Coh	F07 Coh	
	Six-Year Graduation Rate	MATH	50.0%	80.0%	100.0%	92.3%	83.3%	80.0%	
		PLNU*	73.2%	75.5%	76.1%	75.5%	78.1%	74.5%	
	Indicators		2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	
	Number of Bachelor's Degrees Awarded	MATH	10	13	6	6	7	7	
	Share of PLNU Bachelor's Degrees Awarded	MATH	1.8%	2.2%	1.1%	1.1%	1.3%	1.2%	
	Indicators		Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	
	% of enrl UG who are race/ethnically diverse	MATH	14.7%	11.1%	30.0%	25.0%	28.0%	19.0%	
PLNU*		20.1%	21.8%	24.0%	29.0%	32.3%	34.2%		

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Four: Quality of Program Outcomes (continued)

It is not expected that departments will be able to answer all of the following questions. Answer those that apply.

Curricular Information	Describe the significant changes that you have made to this program based on assessment of student learning outcomes data, program reviews, etc.	
	Describe regular opportunities for students to apply their knowledge (internships, practicums, research projects, senior projects, etc.). Estimate what percentage of your majors participate in these opportunities.	
	Describe any public scholarship of your undergraduate students (conference presentations, publications, performances, etc.). What percentage of your undergraduate students are involved in these activities?	
	Describe your undergraduate student success rate for passing licensure or credentialing exams.	
	Describe any study abroad opportunities organized by your program. What percentage of your majors are involved annually (annualize the number)? How many students outside of your department participate in this program (Annualize the number)?	
	What are the distinctives of your program?	
Post-Baccalaureate Information	Describe your success with student acceptance into post-baccalaureate education.	
	Describe your success with students acquiring jobs in their discipline.	
	Describe the findings from any alumni surveys that you have conducted for your program.	

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Five: Scope, Productivity and Costs of the Program

Criteria	Indicators	F02 Coh	F03 Coh	F04 Coh	F05 Coh	F06 Coh	F07 Coh	Comments (300 word limit for each comment)	
Student Data	Six-Year Graduation Rate	MATH 50.0%	80.0%	100.0%	92.3%	83.3%	80.0%	When considered collectively what does this student data say about the productivity of your program?	
		PLNU* 73.2%	75.5%	76.1%	75.5%	78.1%	74.5%		
	Indicators		2007-08	2008-09	2009-10	2010-11	2011-12		2012-13
	Number of Bachelor's Degrees Awarded	MATH 10	13	6	6	7	7		
	Share of PLNU Bachelor's Degrees Awarded	MATH 1.8%	2.2%	1.1%	1.1%	1.3%	1.2%		
	Indicators		Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012		Fall 2013
	FTF App Enrollment Rate (Enrolled/Completed Apps)	MATH 30.4%	23.1%	35.7%	27.3%	26.1%	7.4%		
	PLNU* 31.1%	23.9%	21.3%	18.1%	19.8%	21.8%			

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Five: Scope, Productivity and Costs of the Program (continued)

Criteria	Indicators	Fall 2010	Fall 2011	Comments (300 word limit for each comment)	
Cost and Revenues (From the Delaware Study)	Student credit units taught (UG fall only)	MATH ----- % of PLNU*	1,651.0 ----- 4.7%	1,708.0 ----- 5.0%	When considered collectively, what does the data above say about the productivity and efficiency of your program?
	% of credit units taught by full-time faculty	MATH ----- PLNU*	85.3% ----- 75.5%	91.7% ----- 75.7%	
	Student credit units per faculty FTE	MATH ----- PLNU*	273.8 ----- 197.0	272.0 ----- 198.8	
	Student/Faculty Ratio (Student FTE/Faculty FTE)	MATH ----- PLNU*	17.11 ----- 12.32	17.00 ----- 12.42	
	Indicators		2010-11	2011-12	
	Student credit units taught (UG & Grad - full year)	MATH	3,699.0	3,489.0	
	Cost per Student Credit Unit	MATH ----- DE Bchmrk	\$134 ----- \$169	\$148 ----- \$173	
	Indicators			Unfilled Capacity	
	Unfilled Course Capacity	MATH ----- PLNU Median		14.1 ----- 14.1	
	When considered collectively, what does the data above say about the aspects of your program that need further study?				
	Indicators		2010-11	2011-12	
	Extra revenue generated (lab fees, activity fees, etc.)	MATH			
	Extra revenue/student credit unit	MATH	\$0	\$0	
	Additional costs (See Glossary)	MATH			
	Additional costs/student credit hour	MATH	\$0	\$0	
Describe efficiency gains and cuts made by this program in the last four years.					

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Six: Curriculum Analysis

This section asks you to consider your data from last year with a particular focus on your curricular data (the data that was color coded red, yellow and blue). If you need the data resent, please email Maria.

Criteria	Indicators	Current Catalog		Comments (300 word limit for each comment)		
Curriculum Breadth	Number of menu and elective units required in the program.	MTH MATH	18	No comments, see questions below.		
	Number of menu and elective units offered by the program	MTH MATH	17			
	Menu/Elective Ratio	MTH MATH	0.94			
	Number of menu and elective units above required Middle Third (33%-66%) of Majors for m & e units above required	MATH ----- PLNU	-1 0 to 5			
	Number of menu and elective units required in the program.	MTH MABS	14			
	Number of menu and elective units offered by the program	MTH MABS	17			
	Menu/Elective Ratio	MTH MABS	1.21			
	Number of menu and elective units above required Middle Third (33%-66%) of Majors for m & e units above required	MTH ----- MABS ----- PLNU	3 0 to 5			
	How can you adjust your curriculum to reduce the size of your menus of courses?					
	Are there other ways that you can contract the course offerings in your program to reduce the number of low enrollment courses?					
What GE courses does your department teach? Are there changes that you could make that would make your part of the GE more efficient and effective (e.g. reducing the number of low-enrollment sections, resequencing of classes, reallocation of units)?						
What service courses (non-GE courses that primarily support a program in another department) does you department teach? Are there changes that you could make that would make your service courses more efficient and effective?						
	Indicators		2010-11	2011-12	2012-13	Comments (300 word limit for each comment)
	Unfunded Workload Units	MATH	3	3	4	

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Unfunded Load	What curricular changes can your department make to reduce the amount of unfunded load? (e.g. reducing the number of labs/studios/lessons, increasing lab or activity fees to cover the unfunded load, etc.)	
	What faculty loading changes can your department make to reduce the amount of unfunded load in your program?	

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Seven: Impact and Opportunities

Criteria	Indicators	Response (200 word limit)
Impact	How is this program essential to PLNU?	
	How is this program related to the success of other programs at PLNU?	
	What are the benefits to PLNU of keeping this program as it is?	
	What are the benefits of merging this program with another program either in your department or in another department? With which other program would you partner?	
	Could this program make use of some courses from another program to create an interdisciplinary major?	
Opportunity	Aside from additional staff, what would it take to make this program grow and become outstanding?	
	What have you learned about changing trends in your discipline from looking at similar programs at our comparators?	PLNU Comparator List
	Are there new developments in pedagogy in your discipline? What would be required to implement these changes in pedagogy in your department?	
	Are there national trends in higher education or industry that are particularly important to your discipline? If yes, how is your program reacting to those trends?	
	What additional cost savings could you recommend for your unit? What could you give up to help the university trim costs?	