

## Reflection on Standard University Data Set Provided by Institutional Research

This appendix contains a review of Kinesiology data as compared with university patterns and trends in order to provide context for the department's progress relative to other academic departments throughout the university.

\*Unless otherwise noted, all analysis refers to data from AY 2009-10.

### **General Department Efficiency:**

The Kinesiology department currently teaches approximately **4.3%** of the total PLNU undergraduate credit hours (2,885/66,968) and has approximately **3.7%** of the faculty FTE (7.3/193.3). The department accounted for **7.5%** of PLNU undergraduate students in 2009-10, and granted **5.1%** of the undergraduate degrees. A comparison of Kinesiology faculty FTE to the FTE of all other departments is linked below: The data suggests that the Kinesiology faculty FTE is most similar to MICS (7.2), Psychology (8.2) and History/Political Science (7.8) and Art and Design (7.4).

[https://portal.pointloma.edu/c/document\\_library/get\\_file?p\\_l\\_id=56301&groupId=11178&folderId=44508&name=DLFE-2531.pdf](https://portal.pointloma.edu/c/document_library/get_file?p_l_id=56301&groupId=11178&folderId=44508&name=DLFE-2531.pdf)

Summary Data	2006	2007	2008	2009
Kinesiology Undergrad Credit hrs generated*	2865	2596	2913	2885
PLNU Undergrad Credit hrs gen*	67,456.5	68,697.0	66,497.5	66,968.0
Kinesiology Faculty FTE	7.4	6.9	7.7	7.3
PLNU Faculty FTE	165.1	180.2	172.5	193.3
Kinesiology Degrees Awarded*	30	24	22	27
PLNU Degrees Awarded	524	579	522	529

The table below summarizes the credit hours taught by each of the comparator departments mentioned above:

Sum of credit hours taught	Catalog year					Grand Total
	'6	7	8	9	10	
Art and Design	2628	2596	2596	2850	2850	13598
<b>Kinesiology</b>	<b>2865</b>	<b>2602</b>	<b>2913</b>	<b>2885</b>	<b>3207</b>	<b>14472</b>
Math/Info/Computer Sci	4022	4069	3977	4108	4305	20481
Psychology	5833	5659	5542	5597	5741	28372
<b>Grand Total</b>	<b>70460</b>	<b>68014.5</b>	<b>68105</b>	<b>68123.5</b>	<b>69240</b>	<b>343943</b>

The total units taught by the Kinesiology department has grown **12%** over the past 5 years (from 2865 to 3207 units), with the majority of growth occurring during the past 2 years. While Kinesiology has averaged 2894.5 units taught over the past 5 years (4.3% of the overall 5-year average units 68,788.6), a more logical indicator of overall departmental *efficiency* might be arrived at via the ratio of total **credit hours taught divided by the departmental faculty FTE**. Accordingly, the overall

efficiency of the department for the past five years can be calculated as follows: **14,472units/7.3FTE= 1982.5.**

To put this in financial terms, on average, each faculty FTE produces 1982.5 credit hours across five years. Annually that is  $1982.5/5 = 396.5$  credit hours. Each full-time student takes up to 34 units annually.  $396.4/34$  is equivalent to 11.6 full-time students. Annual tuition in 2010 was \$26,500.  $11.6 \times \$26,500 = \$307,400$  annual revenue generated per Kinesiology FTE.

**Faculty Structure, FTE, Student-Faculty Ratio:**

The Kinesiology department faculty is very unique among the academic departments across campus. Virtually every member of our faculty has a dual appointment in academics and athletics/Student Development. This inflates our full-time faculty number (14), when in reality over 50% of our faculty either perform coaching or athletic training clinical duties for >50% of their load. Therefore, the faculty FTE (7.3 in 2009) provides a better comparator, and as stated before, Kinesiology represents 3.7% of the university faculty FTE.

The department has a lower student/faculty ratio (11.5:1) than the university (15:1). This statistic is difficult to interpret because, from one perspective, a larger student/faculty ratio could indicate the need for additional faculty. Conversely, from a purely numerical perspective, a larger ratio could indicate a more efficient teaching process. The most likely explanation for our department’s lower ratio is that it is influenced by the CAATE mandated 8:1 student/faculty ratio maintained within the clinical courses in the Athletic Training Education Program. Indeed, this is a tremendously positive aspect of our clinical course of study in the department.

Kinesiology Faculty Structure Data	2006	2007	2008	2009	2010
Full-time faculty	14	14	14	14	13
Coaching < 50%	6	6	6	7	
Coaching 50% or more	8	8	8	7	
Part-time faculty	4	4	6	7	
Faculty FTE	7.4	6.9	7.7	7.3	7.8
Student-Faculty Ratio	11:1	12:1	11:1	12:1	11:1
PLNU undergrad Student-Faculty Ratio	17:1	15:1	16:1	15:1	

**Percentage of Courses Taught by Full-Time Faculty versus Part-Time/Adjunct Faculty:**

For ease of calculations, we considered only the most recent AY for % of courses taught by FT versus PT faculty. Overall, **70.5%** of the 184.5 units offered in '10-11 were taught by full time faculty members and **29.5%** were taught by adjunct faculty.

The department’s *Enrollment Trends by Course* data for the past 5 years is in appendices 21 and 22. We evaluated the trends to determine specific efficiencies to be gained; the shaded column outlines both growth trends and the steps we have taken to create efficiencies in our curricular offerings.

## ***Student Demand for Programs (Program Size and Capacity)***

The undergraduate students in the Kinesiology department (declared majors) represent **7.5%** of the overall PLNU undergraduates (179/2396).

<b>Kinesiology Student Data</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Declared Majors	107	108	122	151	179
<i>First Major</i>	104	106	120	149	178
<b>Declared Majors by Major</b>					
Athletic Training	34	34	32	41	50
Exercise Science	47	50	72	91	117
Physical Education	26	24	18	19	12
<b>Total</b>	<b>107</b>	<b>108</b>	<b>122</b>	<b>151</b>	<b>179</b>

In reviewing student demand and demographic data from the table above, a few facts quickly emerge:

1. The number of declared majors in our department has **increased 67%** in the past 5 years (107 students in '06 to 179 in '10). There has been very little corresponding increase in departmental credit hours offered, suggesting the need to add sections of core courses within the curriculum (i.e. courses labeled "KPE" which are taken by all of our majors). Course enrollment trends bear this out.
2. When analyzed by major, it is evident that the Exercise Science program is driving growth. The major has more than doubled, **increasing 149%** over the past 5 years (from 47 students in '06 to 117 in '10).
3. The ATEP has **grown 47%** (from 34 students to 50 students) in the past 5 years. In 2008, we had our national accreditation renewed until the 2018-19 AY. This is the longest accreditation period granted by the CAATE and it indicates the commission's confidence in the strength of the PLNU ATEP. It appears that the stability of the program is attracting more students. But perhaps more importantly, we are encouraged that the program has successfully graduated students for a decade, and our alumni are encouraging others to apply to the ATEP. This has been very positive for the program.
  - ✓ It should be noted that the ATEP must maintain a student/faculty ratio of 8:1 according to CAATE standards. Therefore, the ATEP has increased load for clinical instructors, primarily by adding 4 units of adjunct faculty load over the 2010-11 AY to the clinical practicum courses ATR 290, 291, 390 and 391 (1 unit each course). The ATEP has self-limited the program to 16 students per cohort to maintain a student-to-clinical-faculty ratio of 8:1. In the future, this is an area where more growth may occur if we decide to increase cohort size. A corresponding increase in clinical faculty load would be necessary in this case. The most cost-effective way to accomplish this would be to utilize adjunct faculty as clinical instructors.

4. The Physical Education program has **decreased** by approximately **50%** (from 26 students to 12). Concerning this decrease, we contend that a number of factors are most likely involved, most notably is the poor job market for educators in general and for physical educators specifically. We also have sensed the need to form a clearer and more streamlined pathway for our students to matriculate into the PLNU School of Education and gain a teaching credential and/or Masters of Education. A few other factors deserve noting:
- ✓ Many incoming freshmen do not appreciate the broad career opportunities that the Physical Education major is designed to prepare them for. We have commonly noted that more students graduate with PE as a major than declare it as freshmen. Also, transfer students earn **56%** of the degrees granted in the PE major. Taken together, this suggests that as freshmen students become aware of the curriculum and career opportunities in PE, and as students transfer to PLNU, we experience increased numbers of students in the PE major.
  - ✓ While the teaching profession is experiencing a tumultuous time in general, and PE is specifically vulnerable to low job prospects, the health, fitness, and disease prevention arenas are offering positive prospects for careers and job growth. As a result, the Kinesiology faculty has discussed the need to change the name of the PE major, as well as to significantly revise the curriculum to more accurately reflect current career opportunities in the field and to expand the existing curriculum for the benefit of our students.

#### **Summary of Student Growth Compared to Faculty Growth:**

While the department has grown by 67% over the past 4 years, and the units offered by the department has grown 12% (2865 units in '06 versus 3207 units in '10), the faculty FTE has remained relatively constant: '06=7.4, '07=6.9, '08=7.7, '09=7.3, and '10=7.8\* A corresponding increase in faculty FTE seems necessary.

(\*Note: the accuracy of the '10 FTE is questionable to us since the department was short by one faculty member as Brandon Sawyer left PLNU to earn the PhD and Nicole Cosby had not yet returned.)

#### ***Degrees granted by major:***

The dramatic growth in our Exercise Science major and graduates is evident here. Exercise Science currently represents **63%** of the degrees granted in the department (19 of 31 degrees in 2010). The major prepares students for graduate school in a variety of healthcare professions; and the growth in this major reflects the growth in healthcare at large. The vast majority of the graduates in Exercise Science pursue advanced degrees in Physical Therapy, Physician Assistant, and various other programs (Chiropractic, Exercise Physiology, Nursing, etc.)

While graduates of the ATEP represented **24%** (31 of 129) of the degrees offered by the department over the past 5 years, and PE graduates represented **25%** (33 of 129), the trend over the past 2 years has been an increase in ATEP majors and a decrease in PE majors. We expect fewer PE degrees granted and more ATEP degrees granted in the near future: while there were 6 graduates of the ATEP in 2010, there are 9, 11, and 16 students in the next 3 cohorts, respectively.

Degrees Granted	2005-06	2006-07	2007-08	2008-09	2009-10
<b>Degrees Granted by Major</b>					
Athletic Training	5	8	9	3	6
Exercise Science	8	15	6	15	19
Physical Education	6	7	10	5	5
Total	19	30	26	23	31

### **Student Success (1<sup>st</sup> Year Retention and Graduation Rates)**

**1<sup>st</sup> Year Retention Rate:** this represents a measure of the persistence by 1<sup>st</sup> year freshmen in the department and our majors. Average retention rates over the past 5 years are **83%** for men and **93%** for women. By major, the 5-yr averages are very similar, **88%** for PE\*, **90%** for ExSc, and **90%** for the ATEP. Persistence is also relatively similar by ethnicity, but a glaring need exists for Black students in the department.

Student Success: Retention	2006	2007	2008	2009	2010	5-Year Ave.
First-time Freshman Retention Rate	82%	94%	86%	85%	91%	<b>88%</b>
<b>Retention Rate by Gender</b>						
Women	100%	100%	86%	88%	91%	<b>93%</b>
Men	71%	83%	88%	80%	92%	<b>83%</b>
<b>Retention Rate by Ethnicity</b>						
American Indian/Alaskan Native						
Asian/Pacific Islander	100%	100%	100%	100%	100%	<b>100%</b>
Black						
Hispanic	100%	100%	67%	80%	100%	<b>89%</b>
White	79%	100%	94%	84%	89%	<b>89%</b>
<b>Retention Rate by Major</b>						
Athletic Training	86%	88%	90%	92%	94%	<b>90%</b>
Exercise Science	89%	100%	88%	79%	93%	<b>90%</b>
Physical Education	0%	100%	75%		0%	<b>44-88%*</b>

**Note:** Retention measured by those who remain at PLNU at one-year, regardless of academic department.

\*The value 88% results after dropping the data from 2006 and 2010 where no students declared PE as a major as 1<sup>st</sup> time freshmen.

**Graduation Rate:** this represents a measure of the success of only the freshmen who began in our department and completed their degree in six academic years. As such, the average graduation rates over the past 5 years are **57%** for men and **68%** for women. By major, the 5-yr averages are **54%** for PE\*, **66%** for ExSc, and **68%** for the ATEP. These numbers are largely influenced by the fact that transfer students are not included as well as those students who migrate to other majors at PLNU. Persistence by first time freshmen appears to differ moderately as a function of ethnicity.

<b>Student Success: Graduation Rates</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>5-Year Ave.</b>
First-time Freshman 6-year Grad Rate	66%	56%	56%	78%	63%	64
<b>Graduation Rate by Gender</b>						
Women	55%	69%	64%	71%	83%	68
Men	89%	20%	40%	90%	47%	57
<b>Graduation Rate by Ethnicity</b>						
Asian/Pacific Islander	100%	50%	100%		0%	83
Black					0%	
Hispanic	100%	0%		100%	60%	87
White	59%	60%	50%	78%	68%	63
Non-Resident Alien	100%			0%		50
Unknown/Other	100%				100%	100
<b>Graduation Rate by Major</b>						
Athletic Training	58%	43%	80%	93%	67%	68%
Exercise Science	63%	80%	33%	88%	67%	66%
Physical Education	78%	50%	0%	0%	33%	32-54%*

\*This value results after dropping the data from 2008 and 2009 where no students graduated in PE major who declared PE as a 1<sup>st</sup> time freshman.

## Degrees Earned by Major:

The Athletic Training major has the highest rate of freshmen declaring the major who earned a degree in the major. The ATEP also had the lowest % of transfer students earning an AT degree (6%) and the lowest migration rate from other departments on campus (25%). The Exercise Science program had the highest % of students coming from another major on campus (46%, with students migrating most commonly from Biology). Dr. Kugler, Director of Exercise Science, has a close working relationship with Biology faculty and serves to guide students into the careers that the major will prepare them to enter. This finding speaks to the continuing need for resources devoted to the advising and internship development functions needed for these Exercise Science students. The Physical Education major had the lowest % of freshmen declaring it as a major (13%), and also had the highest % of transfer students who earned a degree in PE (56%).

<b>Degrees Earned by Major</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Totals</b>	<b>Total % of major</b>	<b>Comments on Data</b>
<b>Athletic Training</b>	<b>5</b>	<b>8</b>	<b>9</b>	<b>3</b>	<b>7</b>	<b>32</b>		
<i>Freshman in major</i>	3	7	6	1	5	22	<b>69%</b>	Highest retention rate in dept
<i>Freshman in different major</i>	1	1	3	1	2	8	<b>25%</b>	Lowest rate of migration
<i>Transfer Student</i>	1	0	0	1	0	2	<b>6%</b>	Lowest transfer rate in dept
<b>Exercise Science</b>	<b>8</b>	<b>15</b>	<b>6</b>	<b>15</b>	<b>19</b>	<b>63</b>		
<i>Freshman in major</i>	0	2	1	4	5	12	<b>19%</b>	
<i>Freshman in different major</i>	6	9	2	4	8	29	<b>46%</b>	Highest rate from other major
<i>Transfer Student</i>	2	4	3	7	6	22	<b>35%</b>	
<b>Physical Education</b>	<b>6</b>	<b>7</b>	<b>11</b>	<b>5</b>	<b>5</b>	<b>34</b>		
<i>Freshman in major</i>	0	0	1	1	2	4	<b>13%</b>	Lowest rate of fresh declaring

<i>Freshman in different major</i>	3	2	4	2	1	12	<b>31%</b>	
<i>Transfer Student</i>	3	5	6	2	2	18	<b>56%</b>	Highest % of transfers in dept
<b>Total</b>	<b>19</b>	<b>30</b>	<b>26</b>	<b>23</b>	<b>31</b>	<b>129</b>		

***Degrees by Gender and Ethnicity:***

The table below summarizes degrees granted by gender and ethnicity. On average, **women** earn about **60%** of the degrees in Kinesiology, reflecting the gender disparity that exists across the undergraduate campus. In 2009, 65% of the overall first-time freshmen were women. Additionally, while the large majority of degrees were granted to white students, an increasing number of Hispanic and Asian students are earning degrees from the Kinesiology department. This reflects positive trends in diversity across the university; a trend that must continue since the current makeup of our department does not adequately represent the workforce that our students will be joining upon graduation.

<b>Degrees Granted</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>
<b><i>Degrees Granted by Gender</i></b>					
Women	12	15	13	14	19
Men	7	15	11	8	8
<b><i>Degrees Granted by Ethnicity</i></b>					
Asian/Pacific Islander	1			3	2
Hispanic		2	2	6	4
White	18	27	20	13	21
Non-Resident Alien		1			
<b><i>Degrees Granted by Entry Status</i></b>					
Department Freshmen	6	12	13	8	14
Other Department Freshmen	7	9	4	5	9
Transfer	6	9	9	10	8
<b>Total</b>	<b>19</b>	<b>30</b>	<b>26</b>	<b>23</b>	<b>31</b>

## Student Preparation Level and Demographics (by major)

The table below compares the GPA and SAT scores of incoming Kinesiology freshmen versus PLNU freshmen in general: (Note comments in the right column)

Incoming Student Profile	2006	2007	2008	2009	2010	Comments on Data
<b>First-time Freshmen</b>						
New students-Kinesiology	18	22	26	35	47	Growth here mirrors the dramatic dept growth.
New students-PLNU	534	562	538	531	538	Enrollment constant: explained by enrollment cap
High School GPA-Kinesiology	3.75	3.66	3.84	3.70	3.72	Incoming GPA is remaining relatively constant.
High School GPA-PLNU	3.72	3.65	3.71	3.72	3.68	Kinesiology GPA slightly higher than PLNU incoming freshmen.
SAT score-Kinesiology	1110	1084	1146	1079	1112	Average SAT scores also remaining constant
SAT score-PLNU	1147	1154	1127	1130	1125	SAT scores slightly higher than Kinesiology

## Movement Through Programs: (Time to Degree)

The table below indicates that First-Time freshmen in Kinesiology take on average **3.88 years** to graduate, compared to the average across the university of 4.09 years. This is a more efficient rate for Kinesiology than existed in 2006, when students took almost an additional semester to graduate (4.4 years). Thus, the programs within Kinesiology allow students to complete the traditional “4-year degree”.

In general, men took slightly longer to graduate than women (4.0 vs. 3.8 years). The comparison of Time-to-Degree by Ethnicity is largely disparate because of unequal group sizes. However, there do not seem to be significant differences in movement through our programs as a function of ethnicity.

Average Time-to-Degree	2006	2007	2008	2009	2010
First-time Freshman Cohort Year	2000	2001	2002	2003	2004
First-time Freshman	4.42	4.00	4.14	4.17	3.88
<b>Time-to-degree by Gender</b>					
Women	4.58	4.00	4.11	4.04	3.80
Men	4.19	4.00	4.2	4.33	4.00
<b>Time-to-degree by Major</b>					
Athletic Training	4.00	4.00	4.00	4.18	3.88
Exercise Science	4.40	4.00	3.50	4.14	4.00
Physical Education	4.81	4.00	0.00	0.00	3.50



### III.B.3. Reflection on Standard Data Set:

Summary of Key Findings	Initial Recommendations
<ul style="list-style-type: none"><li>• The number of majors in our department has increased 67%, and the overall units offered by the dept has increased by 12% over the past 5 years. This is primarily due to growth in Exercise Science and Athletic Training.</li></ul>	<ul style="list-style-type: none"><li>• Considering the substantial growth in students entering the department, a corresponding increase seems necessary both in faculty FTE and course sections.</li></ul>
<ul style="list-style-type: none"><li>• The Exercise Science program continues to absorb a large % of students from other majors on campus (most commonly Biology). An important role provided by Dr. Kugler is to guide students into the careers that the major will prepare them to enter.</li></ul>	<ul style="list-style-type: none"><li>• Because our students compete with students from other universities in the area for internships, we should devote more resources to the advising and internship development functions needed for the Exercise Science students.</li></ul>
<ul style="list-style-type: none"><li>• An increasing number of Hispanic and Asian students are earning degrees from the Kinesiology department; however, the % of minority students in the department remains low.</li></ul>	<ul style="list-style-type: none"><li>• The ATEP continues to be committed to facilitating the transfer process, and the faculty has begun to discuss with Admissions how to be more transfer-friendly to community college students interested in Athletic Training. Specific attention should be devoted to recruiting minority candidates.</li></ul>
<ul style="list-style-type: none"><li>• Because the Athletics department has made changes to some Kinesiology adjunct faculty positions occupied by faculty who are head coaches, it will be important to monitor the effect this has on Kinesiology department FTE. To date it has not had an effect.</li></ul>	<ul style="list-style-type: none"><li>• We will propose new curriculum this fall in Health, Fitness and disease prevention. This curriculum will reach a broader group of students and will accommodate the increasing demand for students seeking employment in health care.</li></ul>
<ul style="list-style-type: none"><li>• In an academic environment where students are taking longer to graduate at competitor schools, the programs within Kinesiology allow students to complete the traditional 4-year degree.</li></ul>	