

ITU

Peregrine External Assessment Analytics



EXECUTIVE SUMMARY

- Overall, ITU students consistently perform well on the inbound exams. They also consistently perform much better on the outbound exams than the inbound exams.
- ITU students also perform on par with or slightly above the ACBSP (US) average on the inbound exams. They consistently outperform the ACBSP (US) average on the outbound exams implying that the value students receive from their MBA at ITU is much better than most schools in the United States. The same is true when ITU students are compared with ACBSP accredited schools in Region 7, which includes the State of California, and other Private Not-for-Profit Institutions.
- In comparison with other institutions offering MBA and/or Masters Business programs, within the United States and globally, ITU continues to perform on par with comparative schools
- Stellar performances were noted in Quantitative Research Techniques and Statistics, Accounting, Finance and Organizational Behavior.
- Summary Statistics are contained in the table below

Type of Comparative	T1: Spring 16 (%)	T2: Summer 16 (%)	T3: Fall 16 (%)	T4: Spring 17 (%)
ITU Inbound	47	48	47	48
ITU Outbound	67	74	59	63
ACBSP (US) Inbound	46	46	46	46
ACBSP (US) Outbound	54	54	54	54
ACBSP Region 7 Inbound	48	48	48	48
ACBSP Region 7 Outbound	56	56	56	56
Global Business Schools Inbound	46	46	46	46
Global Business Schools Outbound	48	48	48	48
Schools offering MBA Programs Inbound	47	47	47	47
Schools offering MBA Programs Outbound	55	55	55	55

1.0 Introduction

ITU Master of Business Administration Program offers three (3) concentrations: Business Administration (MBA), Business Analytics (MBA BUA) and Healthcare Management (MBA HCM). The Western Association for Schools and Colleges (WASC) and more recently, the Accrediting Council for Business Schools and Programs (ACBSP) accredits all programs (MBA and DBA) within the Department of Business Administration.

As part of ongoing quality assurance and accreditation requirements of our business programs, ITU is allied with Peregrine Academic Services (PAS) since Spring 2016. PAS, an external assessment body administers inbound and outbound exams to our business students to identify the level of knowledge in ten different areas. These areas are listed below alongside the sub topics that make up each area.

Reminder: Please note that the questions on the Peregrine exams are the same for all students taking these exams (within ITU or outside of ITU). Therefore, there is little possibility of bias.

Knowledge Area	Sub topic(s) tested
Accounting	<ul style="list-style-type: none">• Assets and Liabilities• Auditing and Balance Sheets• Capital Investments• Credits and Debits• Equity• Net Present Value
Business Ethics	<ul style="list-style-type: none">• Corporate Social Responsibility• Discrimination• Ethical Decision Making• Individual and Corporate Ethics and Culture• International Ethical Standards• Stakeholder Relations
Business Finance	<ul style="list-style-type: none">• Balance Sheets and Financial Statements• Cash Flows and Budgets• Debt, Equity and Depreciation• Financial Ratios• Financing, Forecasting, and Financial Planning
Business Leadership	<ul style="list-style-type: none">• Coaching and Mentoring• Leader Traits and Effectiveness• Leadership Development• Leadership Styles and Approaches• Power and Legitimacy
Global Dimensions of Business	<ul style="list-style-type: none">• Collusion and Anti Trust• Global Regulation and Governance• Global Structures and Strategies• Multinational Corporations and Enterprises• Treaties and International Trade
Information Management Systems	<ul style="list-style-type: none">• Artificial Intelligence• Data and Information• Decision Support Systems

	<ul style="list-style-type: none"> • Geographical Information Systems • Information Security • Information Technology
Legal Environment of Business	<ul style="list-style-type: none"> • Business Entities and Structure • Common Law • Legal Agreements and Documents • Regulation and Control • Tariffs and Taxes • Trade Laws and Regulations
Management <ul style="list-style-type: none"> • Human Resources Management • Operations & Production Management • Organizational Behavior 	<ul style="list-style-type: none"> • Affirmative Action • Career Planning and Employee Development • Division of Labor and Organization • Employee Turnover • Employee Values, Motivations and Characteristics • Equal Employment Opportunity • Human Resource Planning, Assessing and Inventories • International and Multinational Organizations • Management Decision Making • Operations and Production Management Strategies • Organizational Culture, Ethics and Values • Organizational Design and Structure • Organizational Strategies • Quality Control and Improvement • Recruiting and Retention • Sampling and Data Analysis
Marketing	<ul style="list-style-type: none"> • Market Segment • Marketing Defined • Marketing Research • Marketing Strategy • Marketplace and Market Share • Types of Marketing
Quantitative Research Techniques & Statistics	<ul style="list-style-type: none"> • Data Analysis Techniques • Descriptive Statistics • Hypothesis Testing • Inferential Statistics • Power Analysis • Probability • Sampling Errors • Sampling Methods and Research Design • Significance Levels • Simulation Models • Type I and Type II Errors

2.0 Methodology and structure of report

The Peregrine exams have been administered to all incoming students into ITU's MBA programs since Spring 2016, and all graduating students from the MBA program. The inbound exams are administered to students through the MGT 503 (Organizational Leadership Theories) course,

which is mandatory for all students to take in their first trimester in the MBA program. Similarly, the outbound exam is required when the student is enrolled in the Capstone courses just before they graduate.

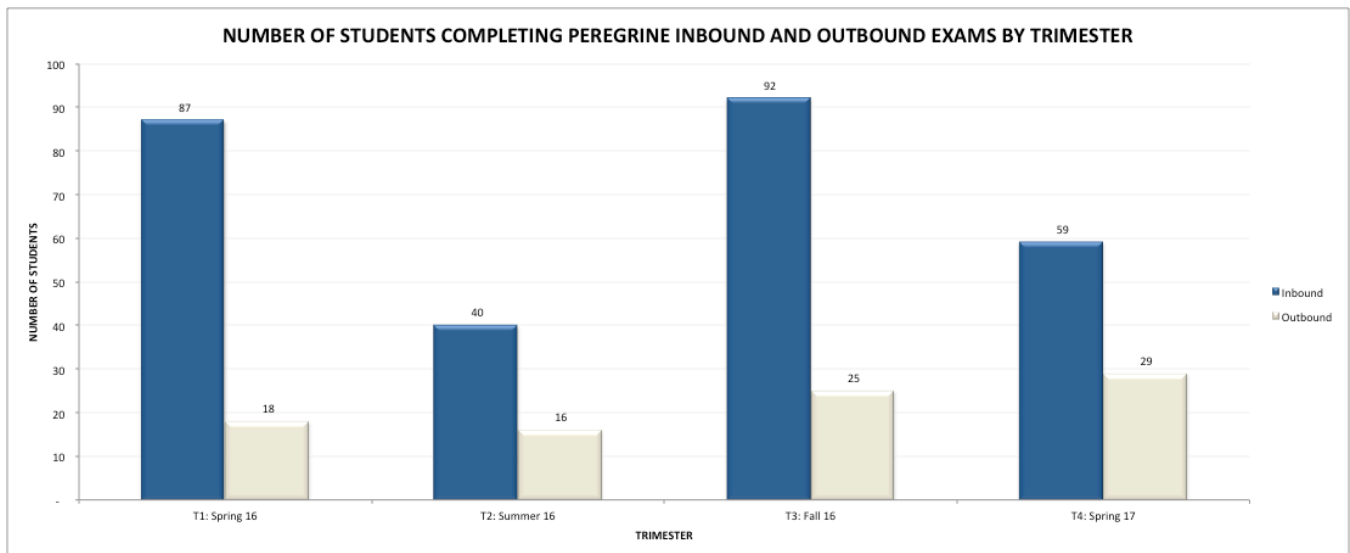
Currently, there are no consequences to a low score on the exams. However, in future, the Business Department aims to build further rigor into this process by

- Introducing a minimum passing score for the inbound exams and
- Oblige the student to take remedial leveling modules with Peregrine in areas they were found deficient on the inbound exams.

The current report is structured in the following manner:

1. Exam completion results: Number of ITU students completing the Peregrine inbound and outbound exams
2. Comparison of ITU student scores by trimester (inbound vs outbound)
3. Analysis of time taken and scores earned: Top 10 and Lowest 10 Inbound vs Outbound
4. Comparison by Cohort: Inbound Students (Spring 16) vs Outbound Students (Spring 17)
5. Comparison with External Scores: ITU vs External Entities (Inbound vs Outbound)
6. Comparison with Knowledge Area: ITU Inbound vs Outbound and External Comparative

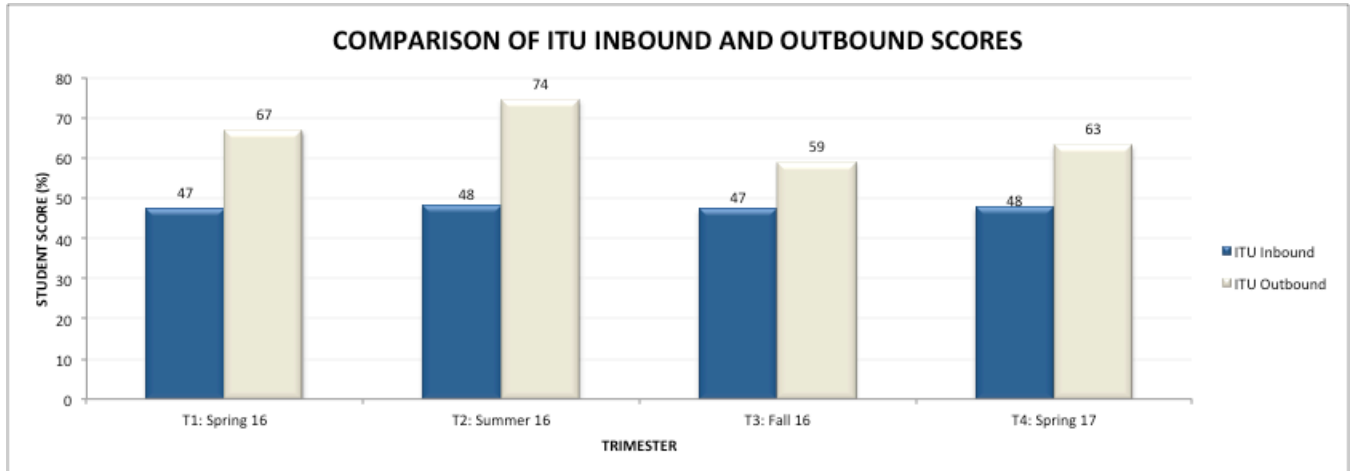
3.0 Exam completion results



- Overall, the number of students doing the inbound exams is generally higher than those completing the outbound exams. This is, however, indicative of the fact that between starting their degrees and completing their degrees, students may opt to take trimester breaks and/or transfer out of the MBA program. Also, the Peregrine exams are mandatory for students starting in Spring 16. As previously mentioned, all new students are required to take the inbound exams in their first trimester. However, in those terms, students graduating from the MBA did not necessarily start Spring 16 and after. Therefore, the exams were recommended but not mandatory for these students starting prior to Spring 16. The drop in students taking the inbound exam may also be explained

by the overall trend in enrollment, which corresponds with the uncertainty with the current political climate.

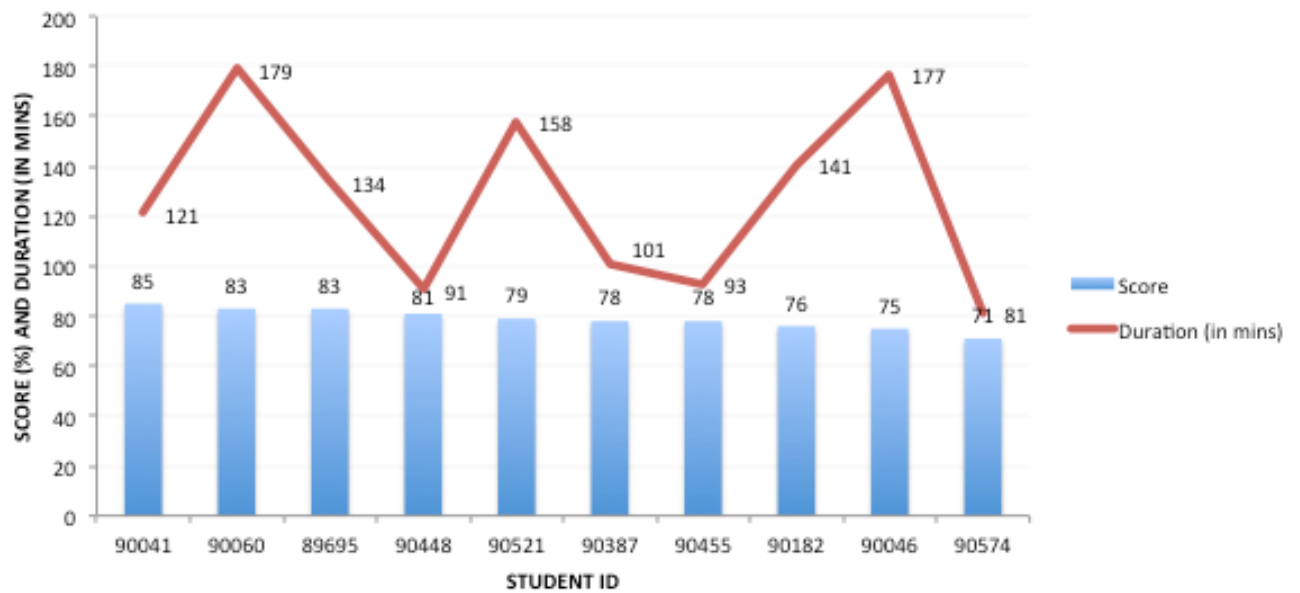
4.0 Comparison of exam scores by trimester



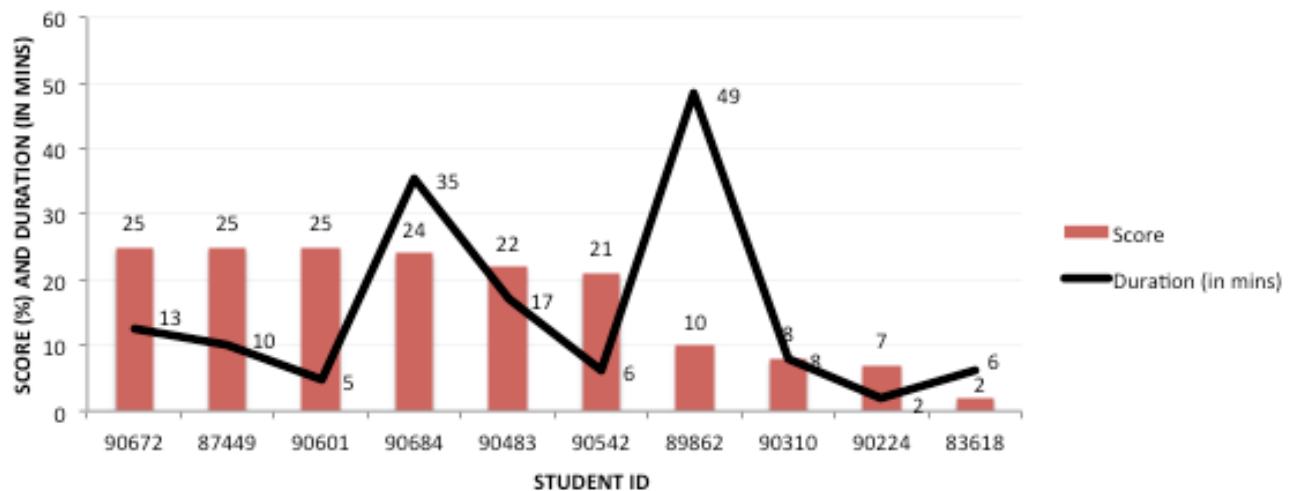
- ITU student performance on the inbound exam has been consistent over the last 4 periods at 47% – 48%. This indicates that students come to ITU with an average level of knowledge. However, it has also been observed that students may sometimes choose to simply complete the exam as opposed to thinking about the responses to the questions being asked. The remedy to this observation has been described in the previous sections. Students, in general perform much better on the outbound exam, which indicates that their time at ITU has served to improve their learning across most knowledge areas. This is explained further in the sections that follow.

5.0 Inbound exam scores versus time taken to complete exam (Top 10 scores and Lowest 10 scores by trimester)

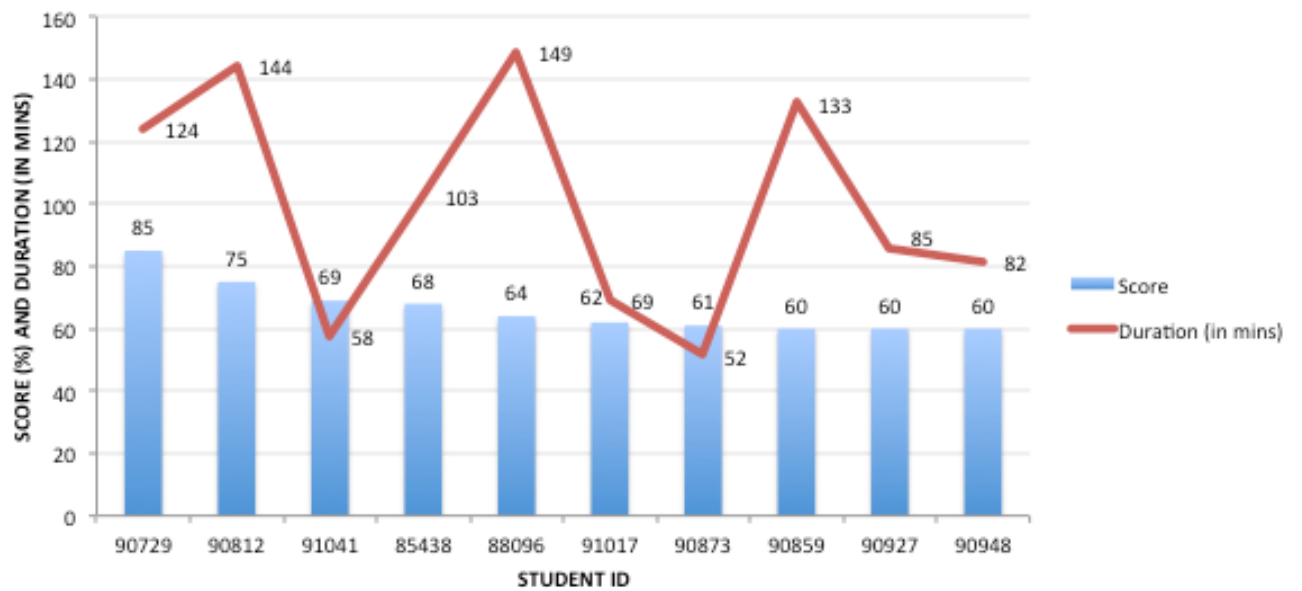
PEREGRINE INBOUND EXAM TOP 10 SCORES VS DURATION - SPRING 16



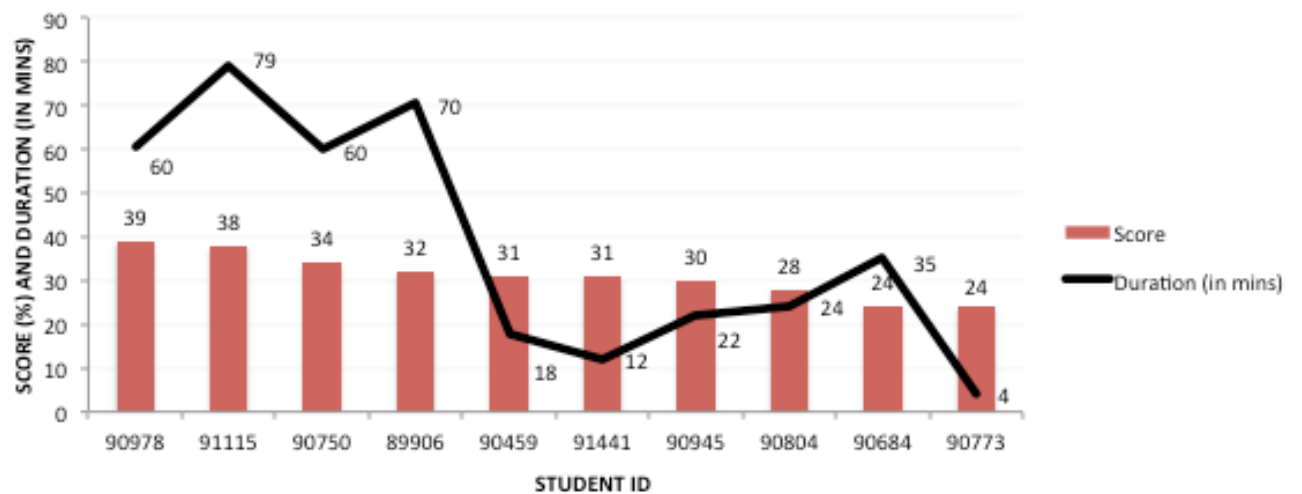
PEREGRINE INBOUND EXAM LOWEST 10 SCORES VS DURATION - SPRING 16



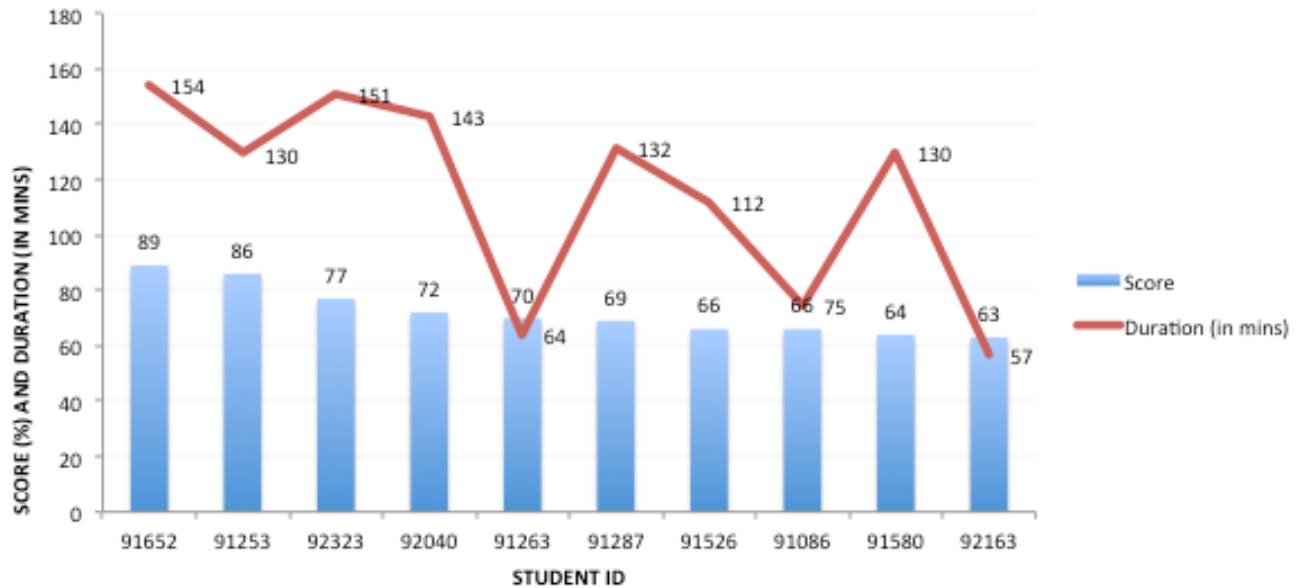
PEREGRINE INBOUND EXAM TOP 10 SCORES VS DURATION - SUMMER 16



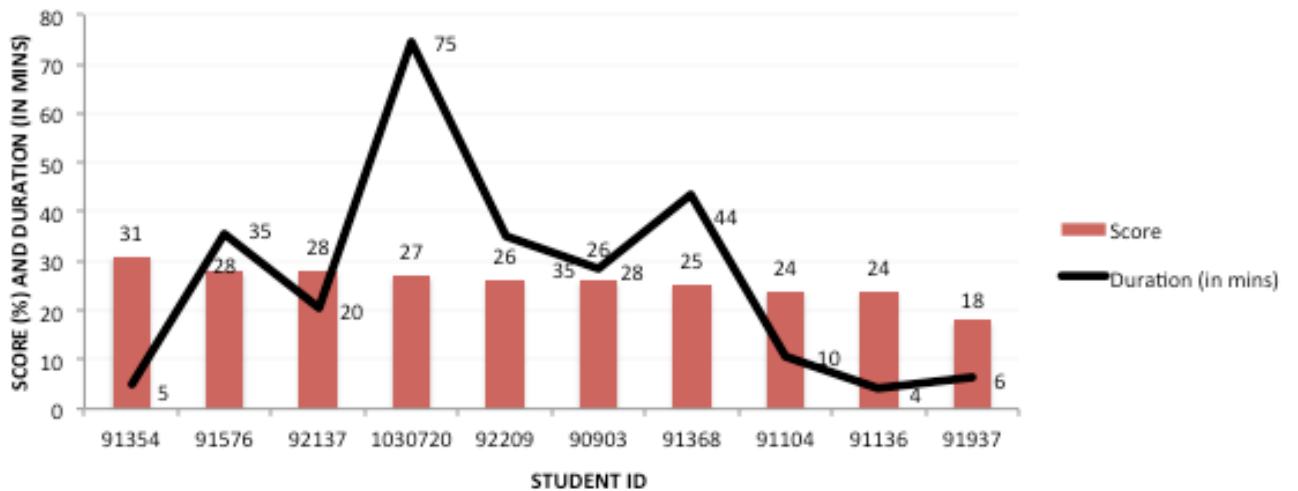
PEREGRINE INBOUND EXAM LOWEST 10 SCORES VS DURATION - SUMMER 16



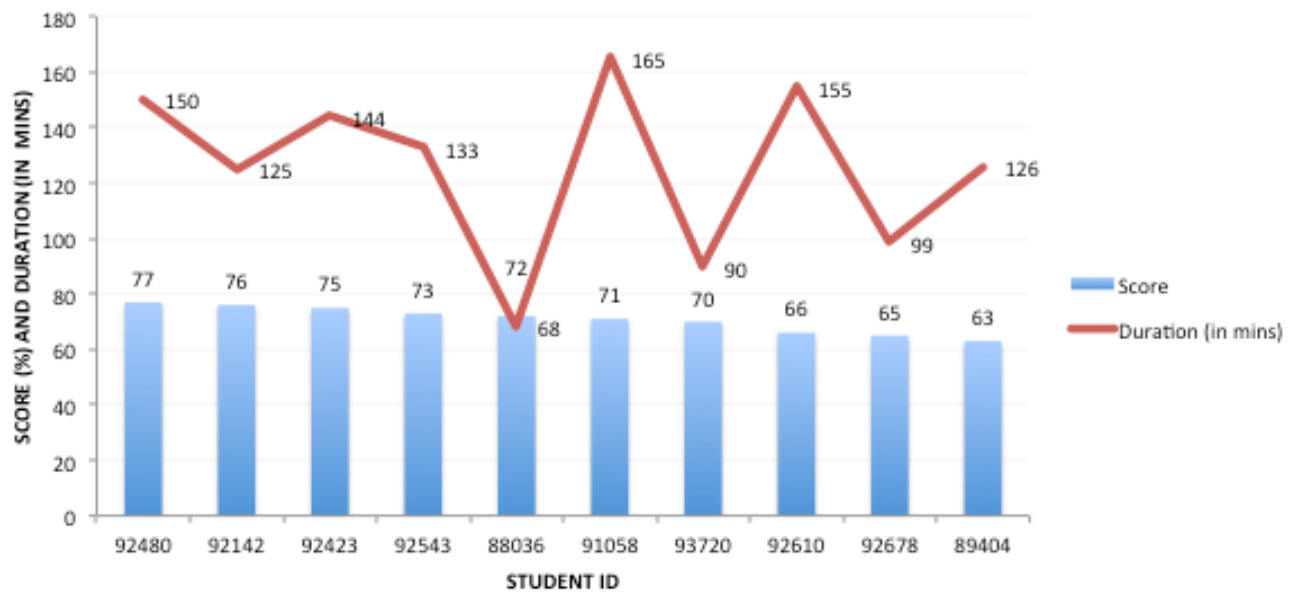
PEREGRINE INBOUND EXAM TOP 10 SCORES VS DURATION - FALL 16



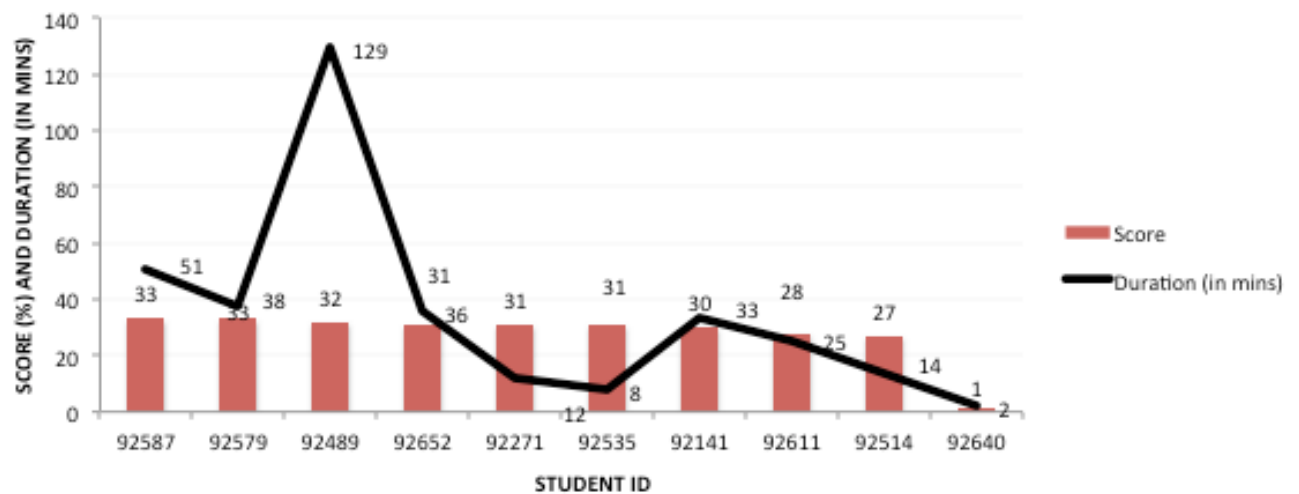
PEREGRINE INBOUND EXAM LOWEST 10 SCORES VS DURATION - FALL 16



PEREGRINE INBOUND EXAM TOP 10 SCORES VS DURATION - SPRING 17



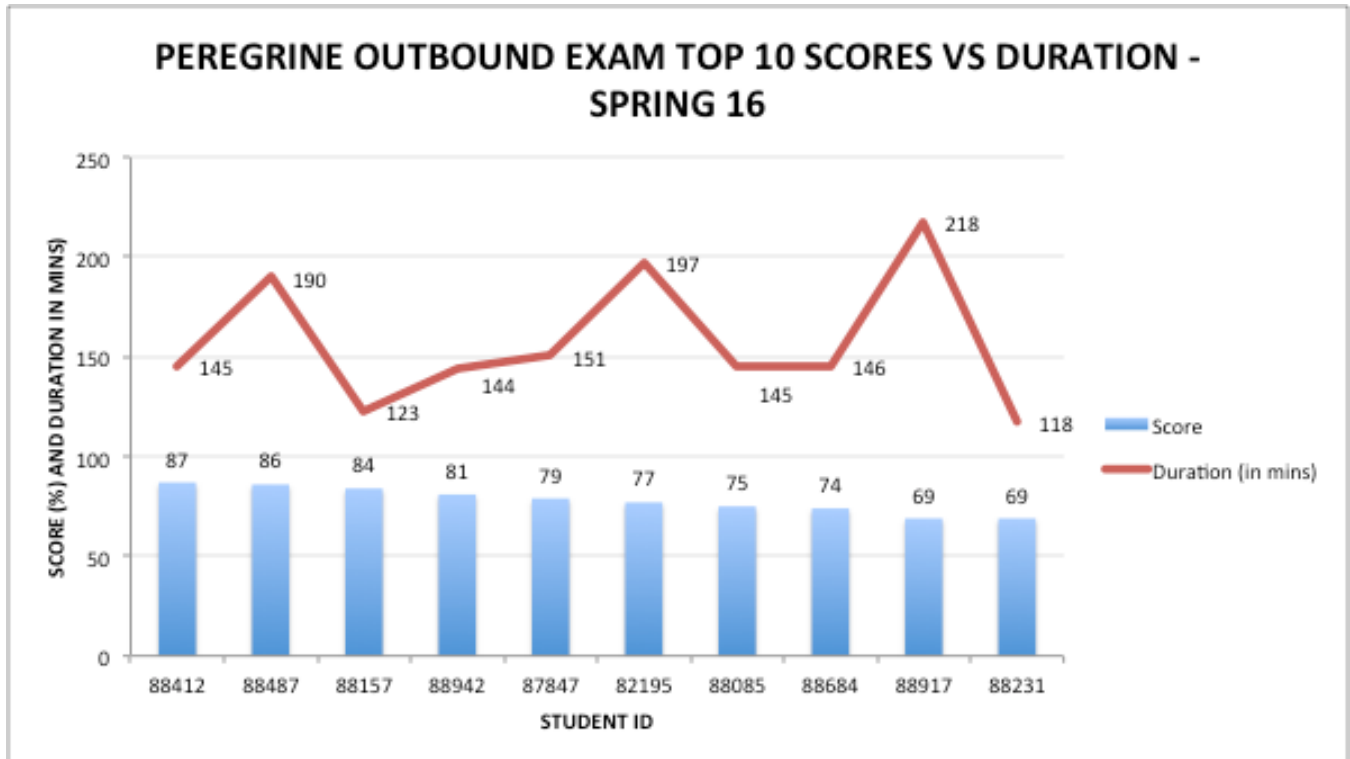
PEREGRINE INBOUND EXAM LOWEST 10 SCORES VS DURATION - SPRING 17

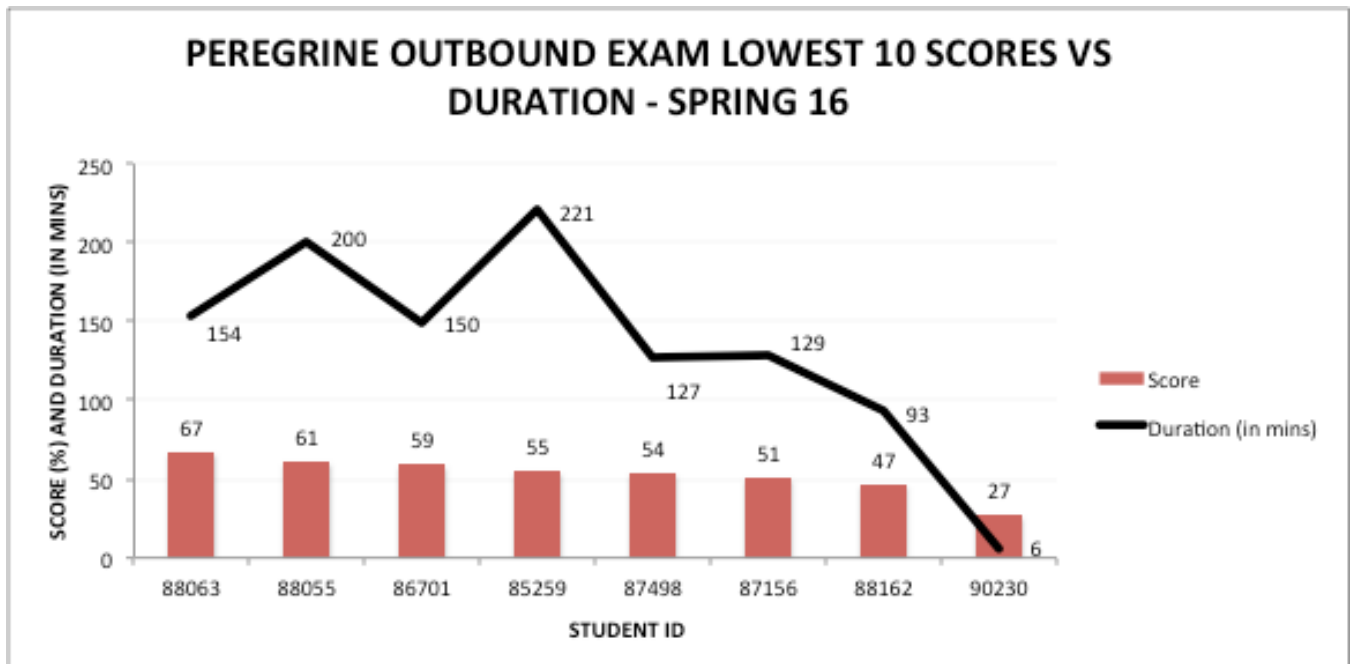


- The preceding eight (8) graphs outline the correlation between top ten (10) and lowest ten (10) scores on the inbound exams and the corresponding amount of time taken to complete the exam. Overall, while some students manage to complete the exams in a little over an hour, an analysis of the top scoring students reveals that those who take the allowed time of three (3) minutes per question and think about their responses, tend to

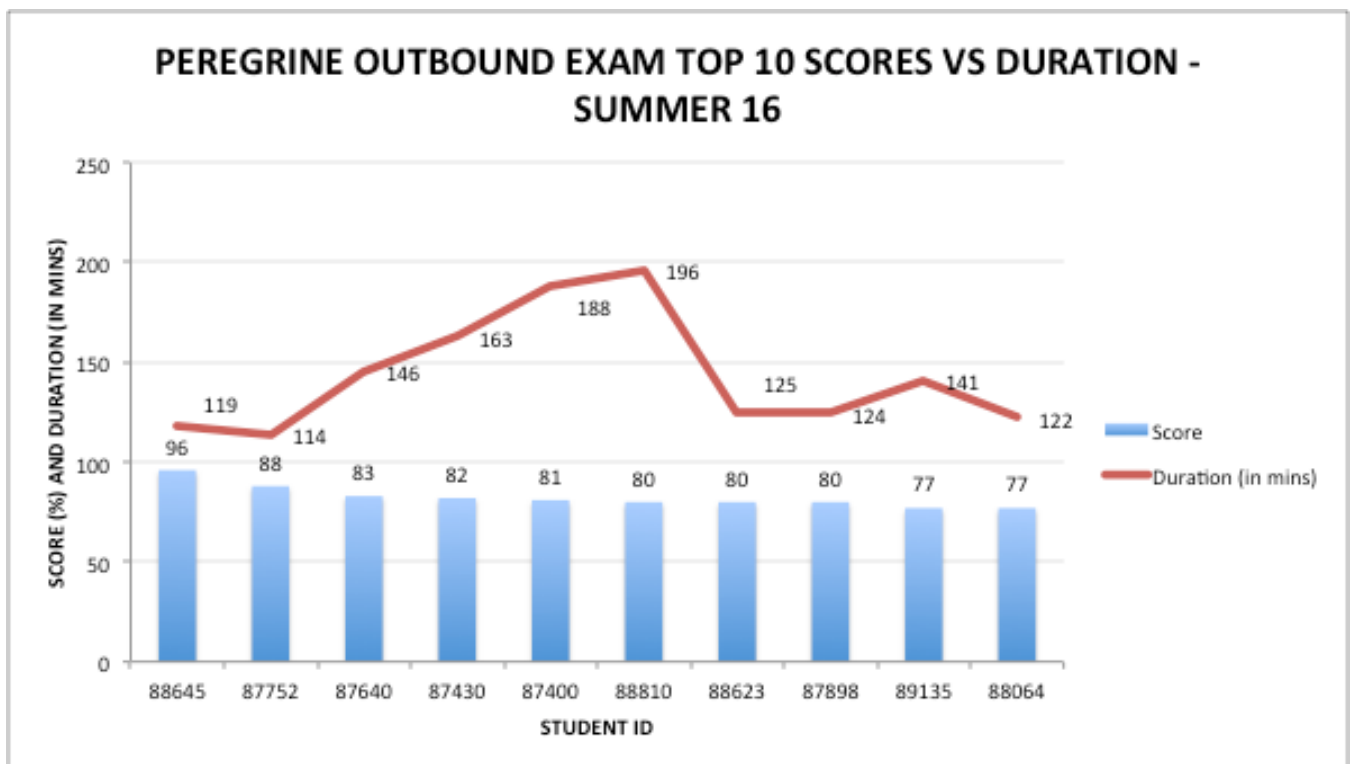
get higher scores than those that just finish the exam because they are approaching other deadlines. On the other hand, students who spend little or no time thinking about their responses, typically either abandon the exam and/or do not perform as well as their other counterparts who take their time to complete their exams.

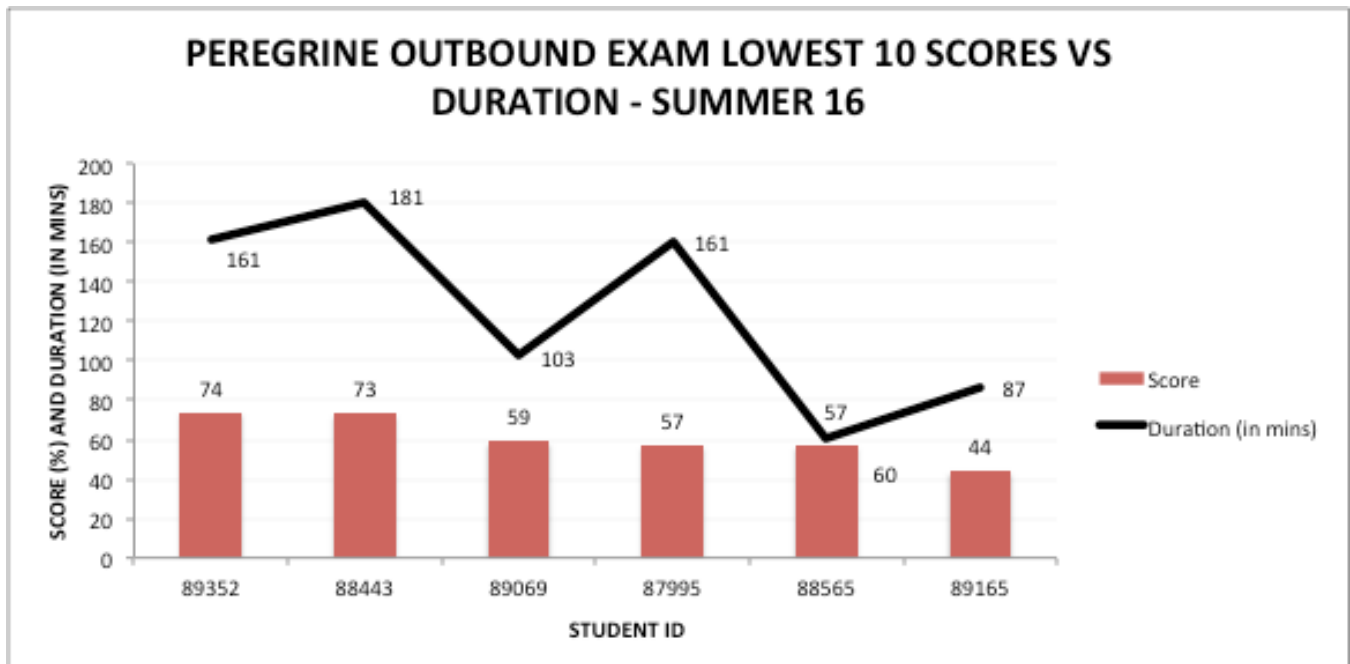
5.1 Outbound exam scores versus duration



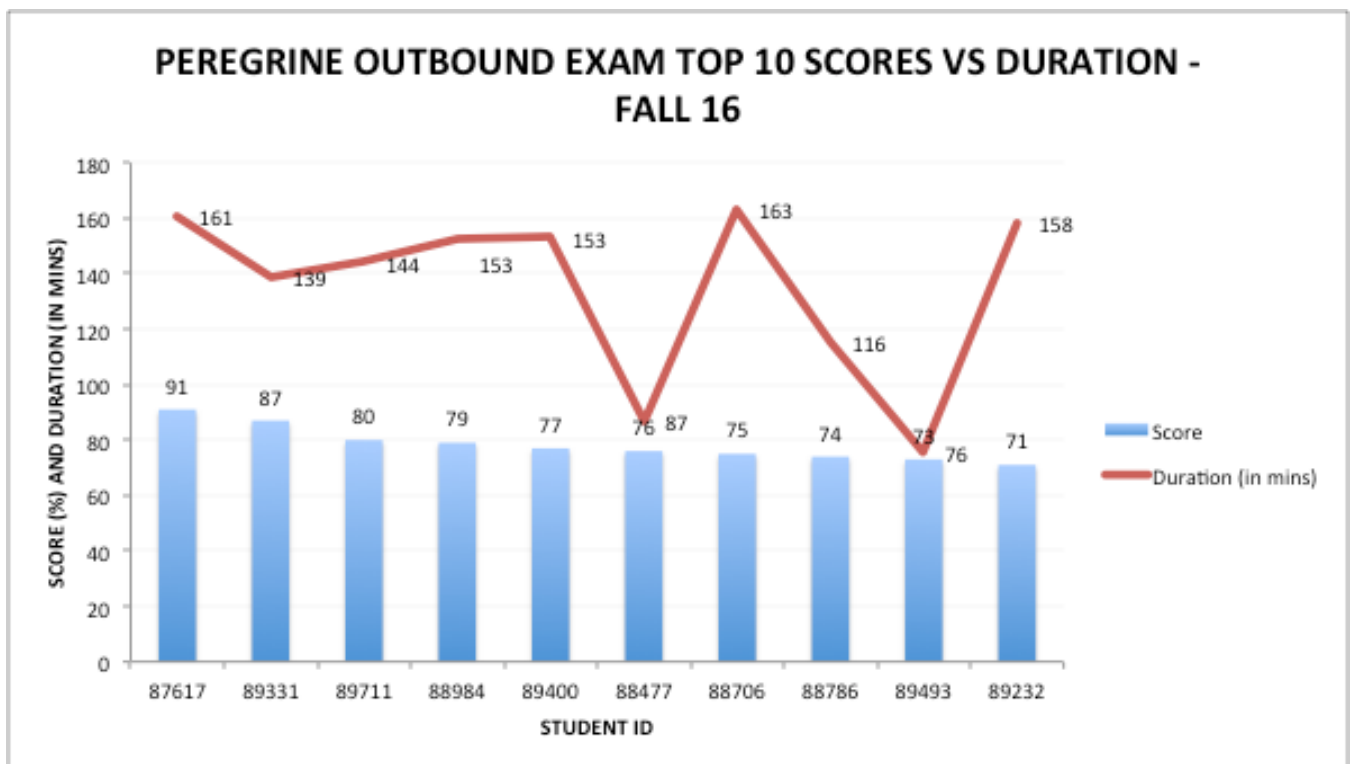


*** Lowest 10 scores in the title of the graph** - Please note that these are the remaining students after the "Top 10" scores have been taken into consideration. There may not necessarily be 10 students for the "Lowest 10" in this trimester.

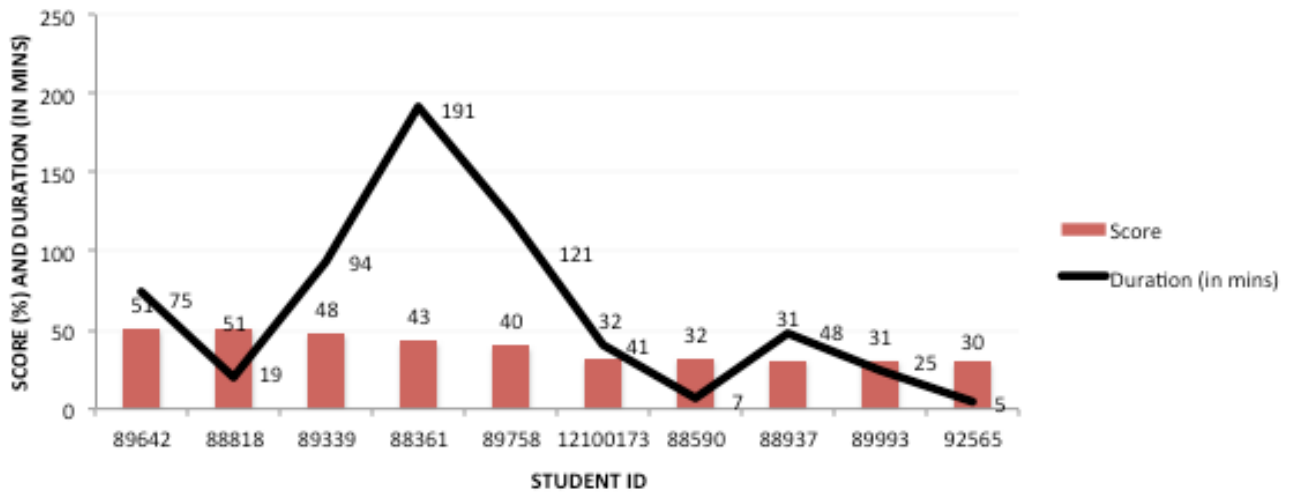




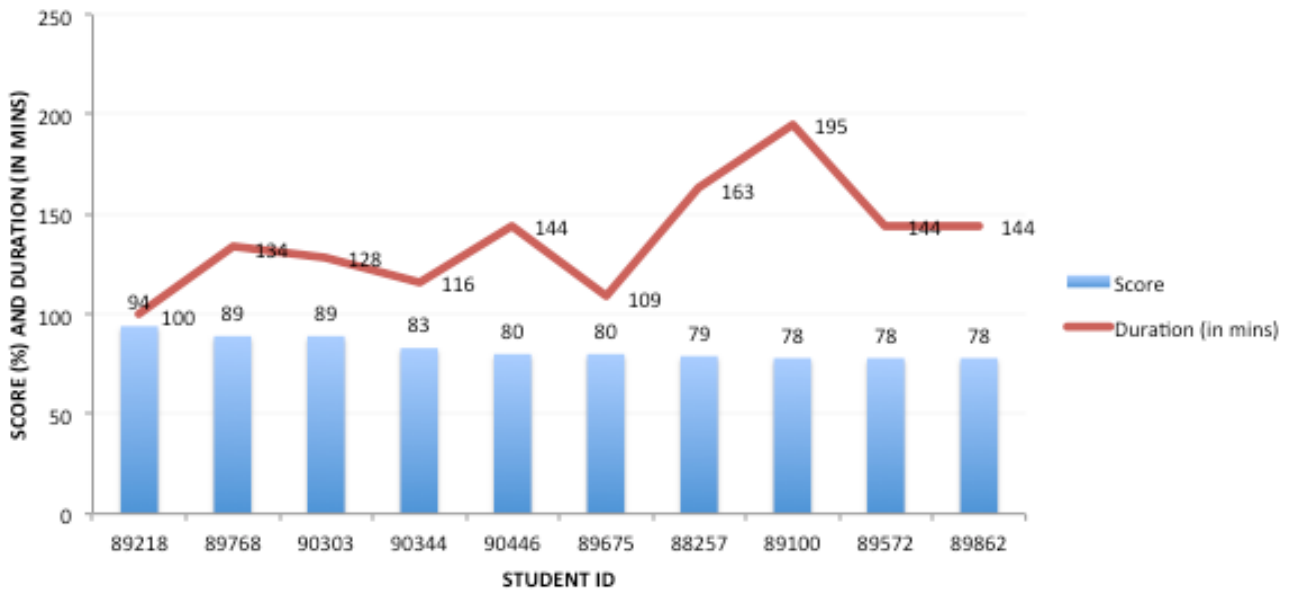
** Lowest 10 scores in the title of the graph - Please note that these are the remaining students after the "Top 10" scores have been taken into consideration. There may not necessarily be 10 students for the "Lowest 10" in this trimester.*

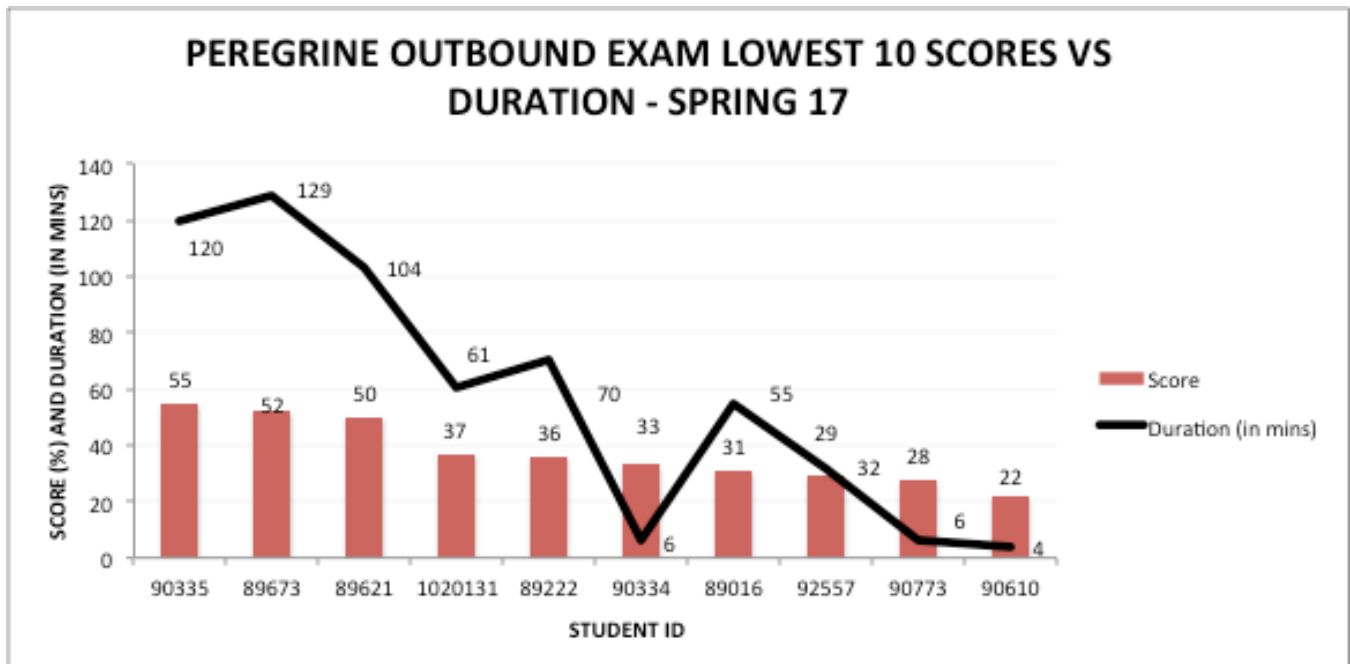


PEREGRINE OUTBOUND EXAM LOWEST 10 SCORES VS DURATION - FALL 16



PEREGRINE OUTBOUND EXAM TOP 10 SCORES VS DURATION - SPRING 17

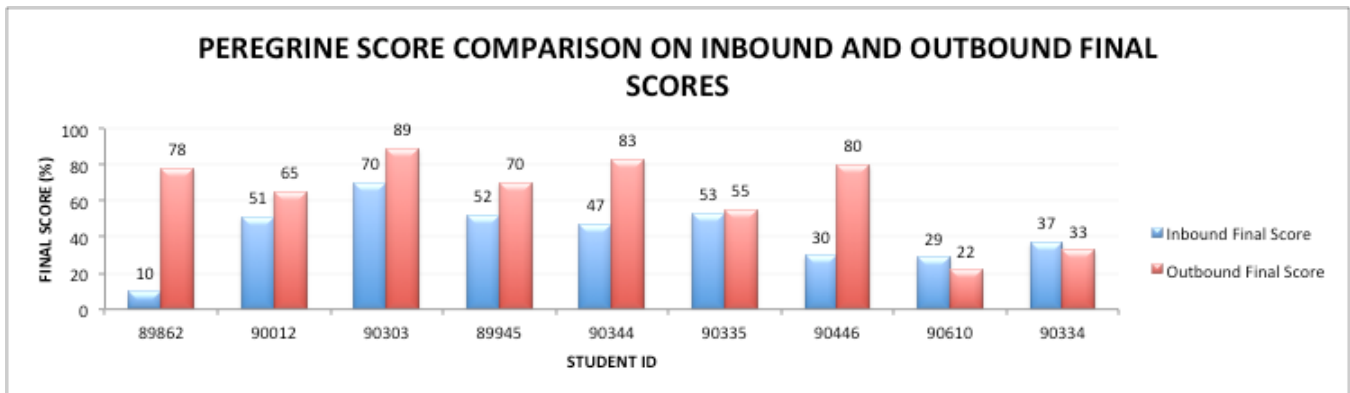




- The preceding eight (8) graphs outline the correlation between top scores on the outbound exams and the corresponding amount of time taken to complete the exam. Overall, most students manage to complete the exams about an hour or more, an analysis of students scoring the lowest results reveals that those who take less than a minute per question or rush through their responses tend to have the lowest scores.

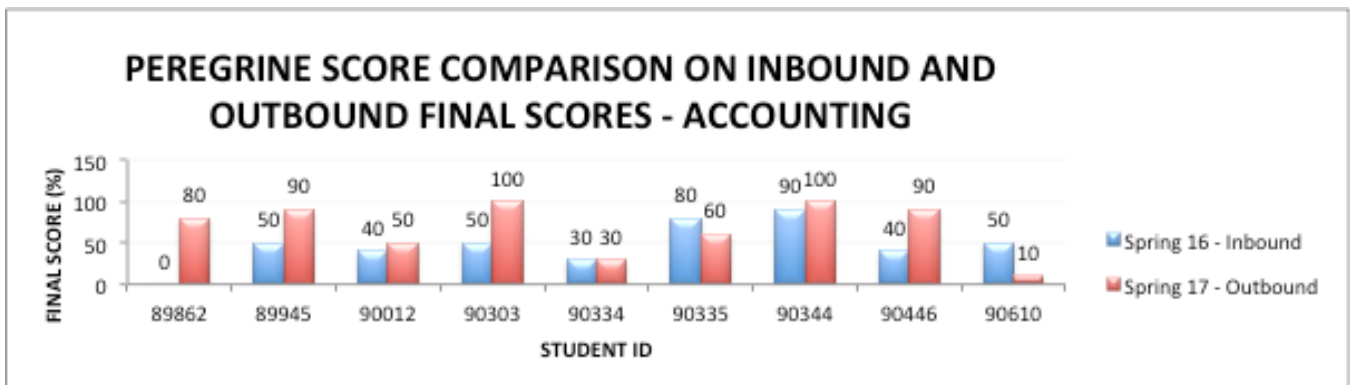
6.0 Cohort Comparison – Student scores on Inbound Exam (Spring 16) versus Student scores on Outbound Exam (Spring 17)

Spring 2016 was the first trimester that the Peregrine exams were made mandatory for incoming and outgoing students. Some students who started their MBA degrees at ITU in Spring 2016 and completed their Inbound exams have, in Spring 2017, completed their outbound exams. There are nine (9) students in this list. For the purposes of protecting their privacy, only their ITU student IDs have been used to compile this report.

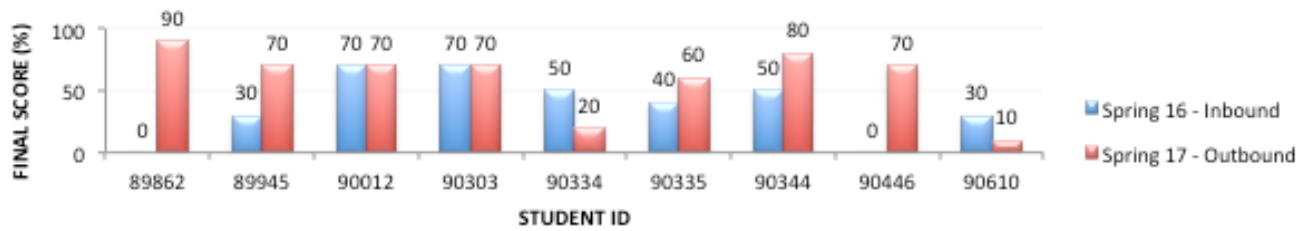


- Overall, most students show marked improvement on the outbound exams as compared to their performance on the inbound exams. A few anomalies were evident amongst this set of students. For example, student ID 90610 and 90334 show a better performance on the inbound exam as compared to their performance on the outbound exams. The sections ahead will outline specific areas of poor performance. However, it must be remembered that students do not face any negative consequences for poor performance. Similarly, they do not also face rewards for good performance. Due to the pressures of being in their final trimester, some students may not have taken these exams seriously. They may also not have allowed sufficient time or thought in responding to the questions.

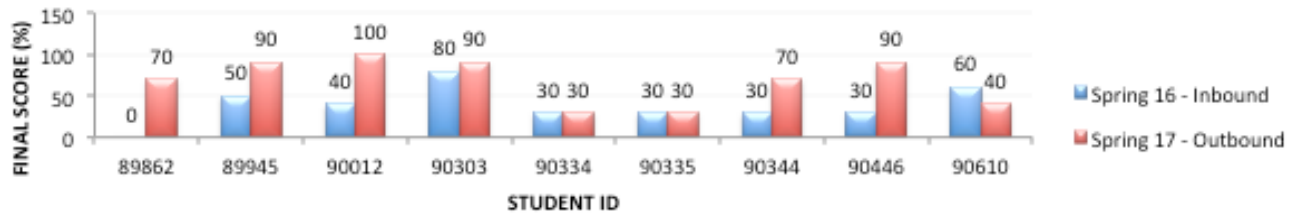
6.1 Cohort Comparison by Knowledge Area – Student scores on Inbound Exam (Spring 16) versus Student scores on Outbound Exam (Spring 17)



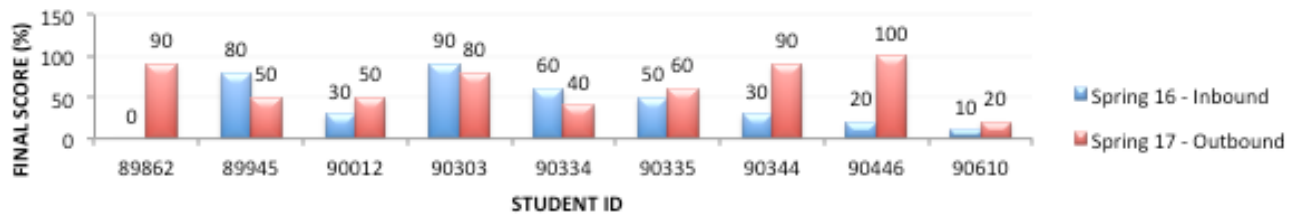
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - BUSINESS ETHICS



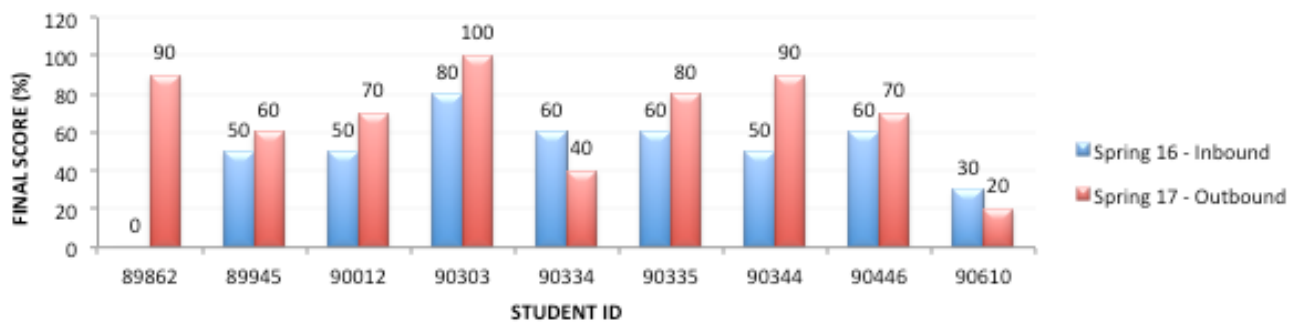
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - BUSINESS FINANCE



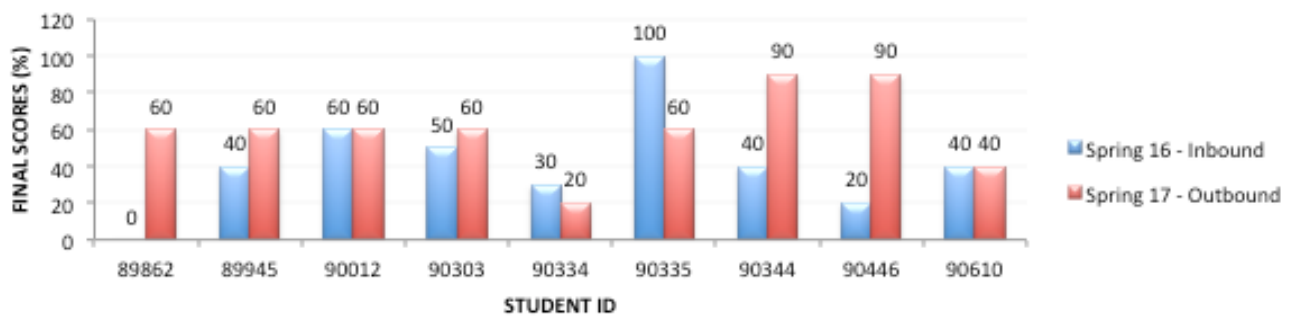
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - BUSINESS LEADERSHIP



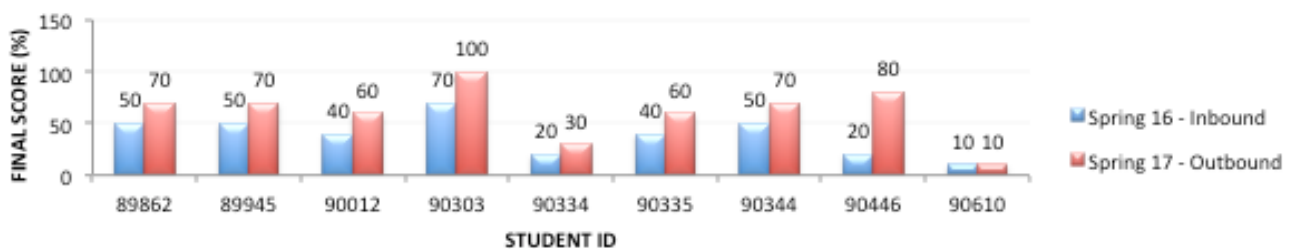
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - GLOBAL DIMENSIONS OF BUSINESS



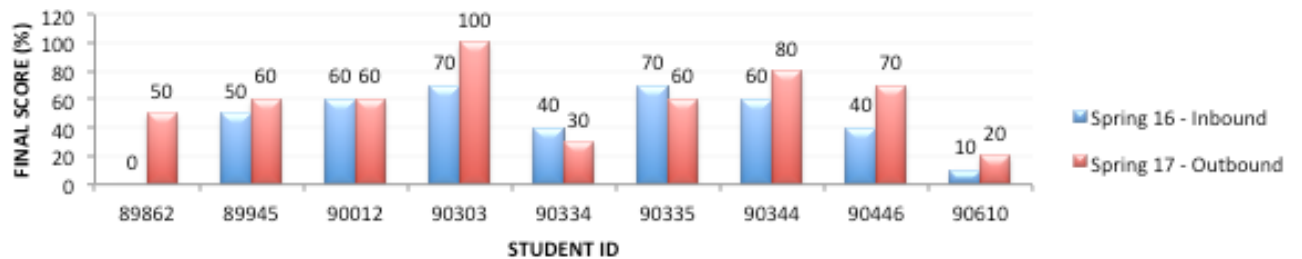
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - INFORMATION MANAGEMENT SYSTEMS



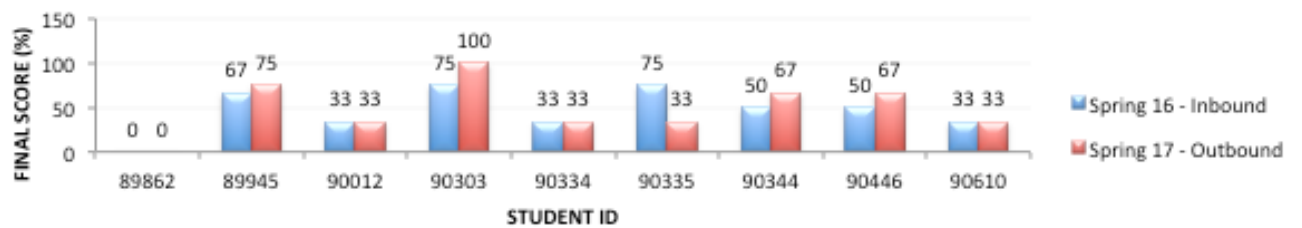
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - LEGAL ENVIRONMENT OF BUSINESS



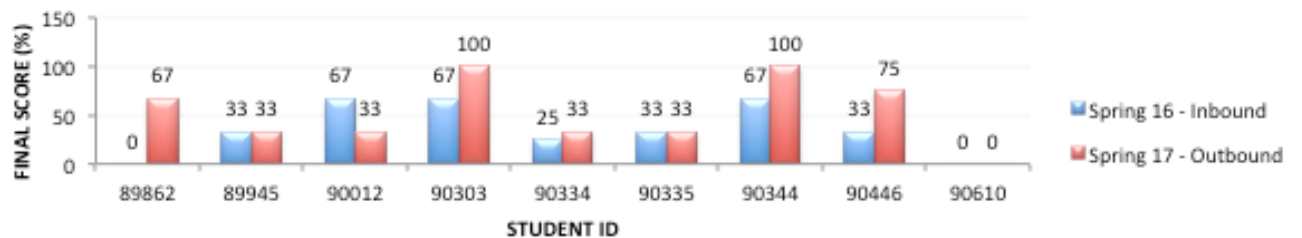
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - MANAGEMENT



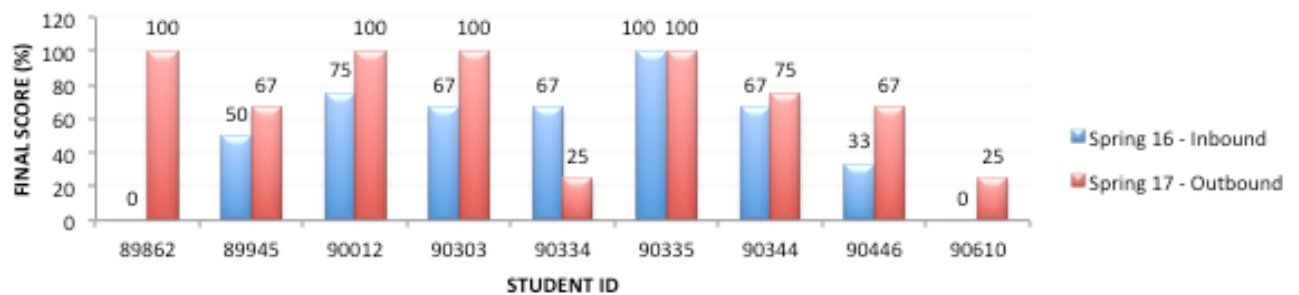
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - HUMAN RESOURCE MANAGEMENT



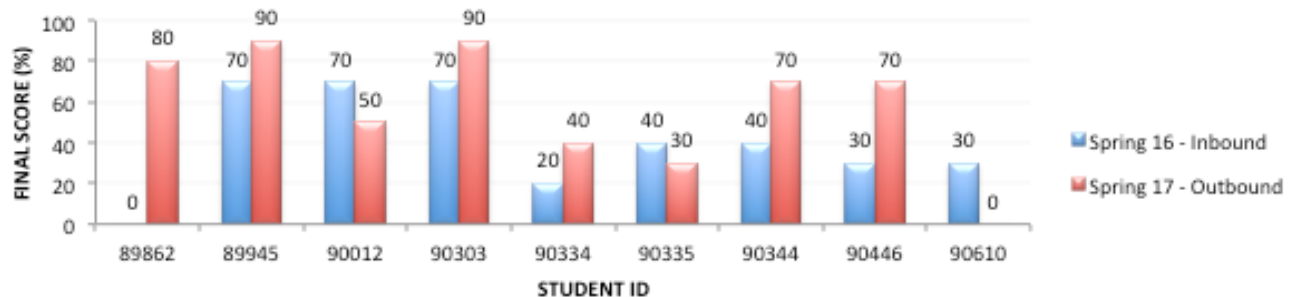
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - OPERATIONS AND PRODUCTION MANAGEMENT



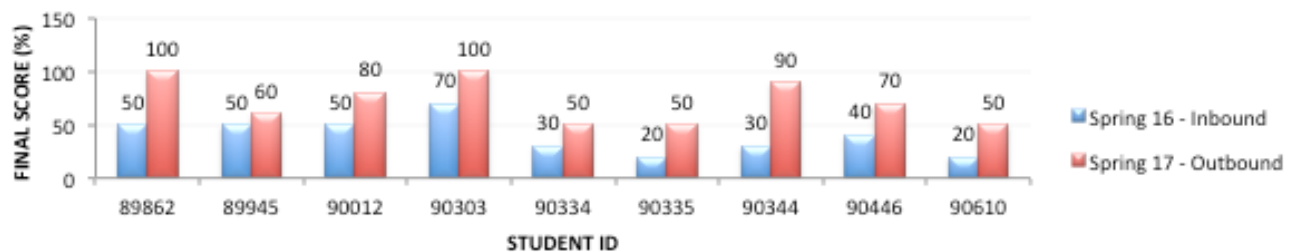
PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - ORGANIZATIONAL BEHAVIOR



PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - MARKETING



PEREGRINE SCORE COMPARISON ON INBOUND AND OUTBOUND FINAL SCORES - QUANTITATIVE RESEARCH TECHNIQUES AND STATISTICS



- As mentioned at the start of this section, two students, 90610 and 90334 display performance contrary to expectations, i.e. their outbound exam scores are lower than their inbound exam

scores. We mentioned potential reasons for their performance previously. We noticed the following trends with these students in relation to areas of poor performance.

Student ID	Knowledge Area	Inbound Score	Outbound Score	Comments
90610	Accounting	50	10	Overall, this student displays poor performance and seems in general to have either been in a rush to complete the exams or to have not given enough thought to the questions. However, Business Leadership, Management and Quantitative Research Techniques seem to be areas where the student has improved from the inbound exam to the outbound exam. Areas such as Information Management Systems, and Legal Environment of Business remain status quo between the inbound and outbound exams.
	Business Ethics	30	10	
	Business Finance	60	40	
	Business Leadership	10	20	
	Global Dimensions of Business	30	20	
	Information Management Systems	40	40	
	Legal Environment of Business	10	10	
	Management	10	20	
	Marketing	30	0	
	Quantitative Research Techniques and Statistics	20	50	
90334	Accounting	30	30	Overall, this student displays poor performance. However, Legal Environment of Business, Marketing, and Quantitative Research Techniques and Statistics seem to be areas where the student has improved from the inbound exam to the outbound exam. Areas such as Accounting, and Finance remain status quo between the inbound and outbound exams.
	Business Ethics	50	20	
	Business Finance	30	30	
	Business Leadership	60	40	
	Global Dimensions of Business	60	40	
	Information Management Systems	30	20	
	Legal Environment of Business	20	30	
	Management	40	30	
	Marketing	20	40	
	Quantitative Research Techniques and Statistics	30	50	

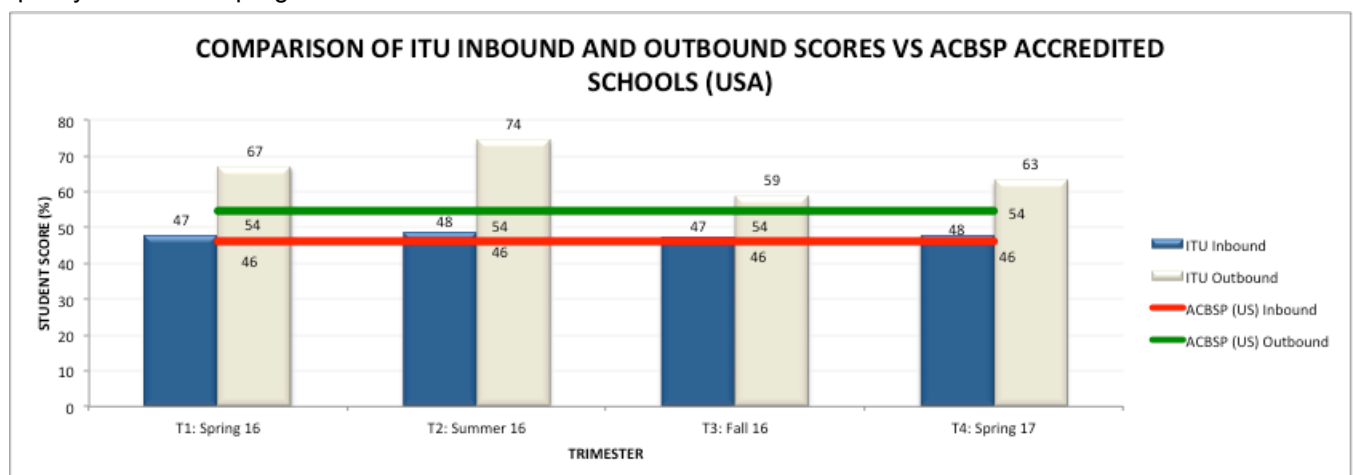
- We also noticed that there were students who, overall performed much better on the outbound exam than the inbound exam. However, an analysis on their performance in the individual subject areas yielded contrary results. These exceptions are listed in the table below.

Student ID	Knowledge Area	Inbound Score	Outbound Score	Comments
90012	Marketing	70	50	Overall, the students showed improved performance on the outbound exam in comparison to the inbound exam. However, their performance in the areas listed on this table showed a decline between the inbound and outbound exams. It is possible that the student did not pay much attention to the questions posed on the outbound exam due to time pressure. It is also interesting to note that most topics are also theory intensive, e.g. marketing, management and leadership.
	Management (Operations & Production Management)	67	33	
89945	Business Leadership	80	50	
90303	Business Leadership	90	80	
90335	Information Management Systems	100	60	
	Management (Human Resource Management)	75	33	
	Marketing	40	30	

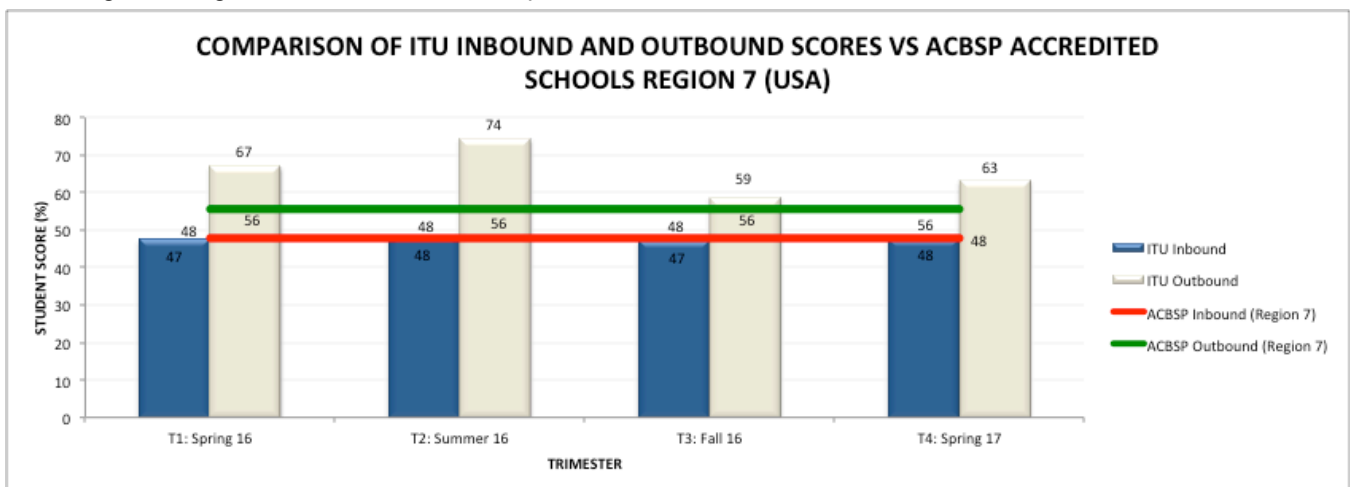
7.0 External comparison of exam scores

Note: As shown in the graphs below, students (ITU and external) enter business programs with a similar level of knowledge and/or competency. This is why most inbound exam scores are very close to each other (ITU and external comparatives).

On the other hand, the difference in the scores on the outbound exams, between ITU students and other external comparatives, is due to the ITU's expert business faculty, and the exemplary quality of business programs ITU offers.



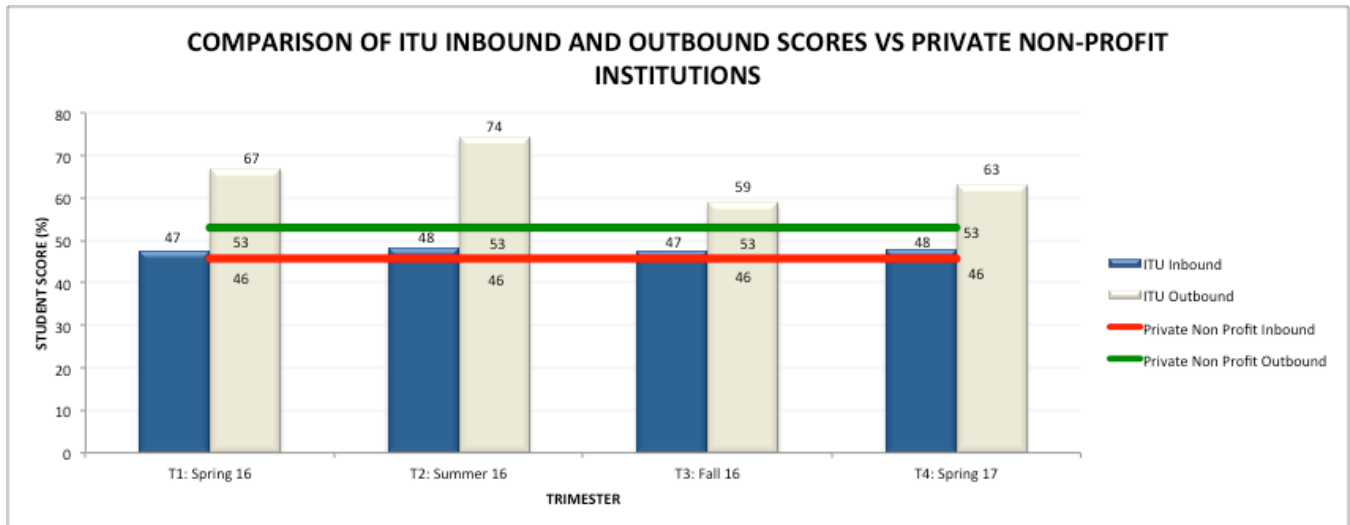
- On the inbound exams, ITU students perform on par with the ACBSP (US) average of 46%. This average for ACBSP (US) schools is a rolling four year average of inbound exam scores for all ACBSP accredited schools in the US that are registered with Peregrine to administer these exams to their students. This reveals that most ITU students come into their Masters program with an average level of knowledge, which is consistent and slightly higher than the national average for most schools. At ITU, we have noticed a trend where students face no repercussions for a poor score. However, it would be interesting to observe how this trend changes if ITU students were to face a penalty of some sort for sub-optimal performance.
- On the outbound exams, ITU students perform much better (63% - 74%) than the ACBSP (US) average of 54%. This average for ACBSP (US) schools is a rolling four year average of outbound exam scores for all ACBSP accredited schools in the US that are registered with Peregrine to administer these exams to their students. This reveals that while most ITU students come into their Masters program with an average level of knowledge, their level of education and opportunities dramatically improved due to the education provided to them during their Business degrees and Internships at ITU. Currently, there is no penalty for sub optimal performance on the outbound exam. However, the Business Department will provide recommendations on competency enhancement to the student with sub optimal performance. But since students are graduating, it is hard to monitor completion of these modules.



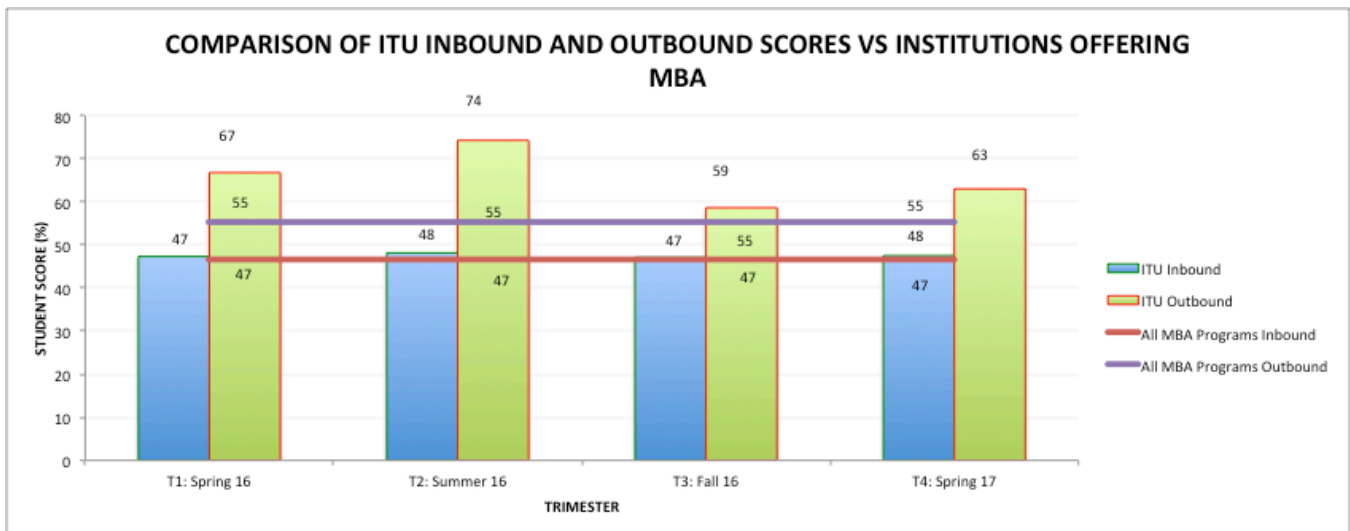
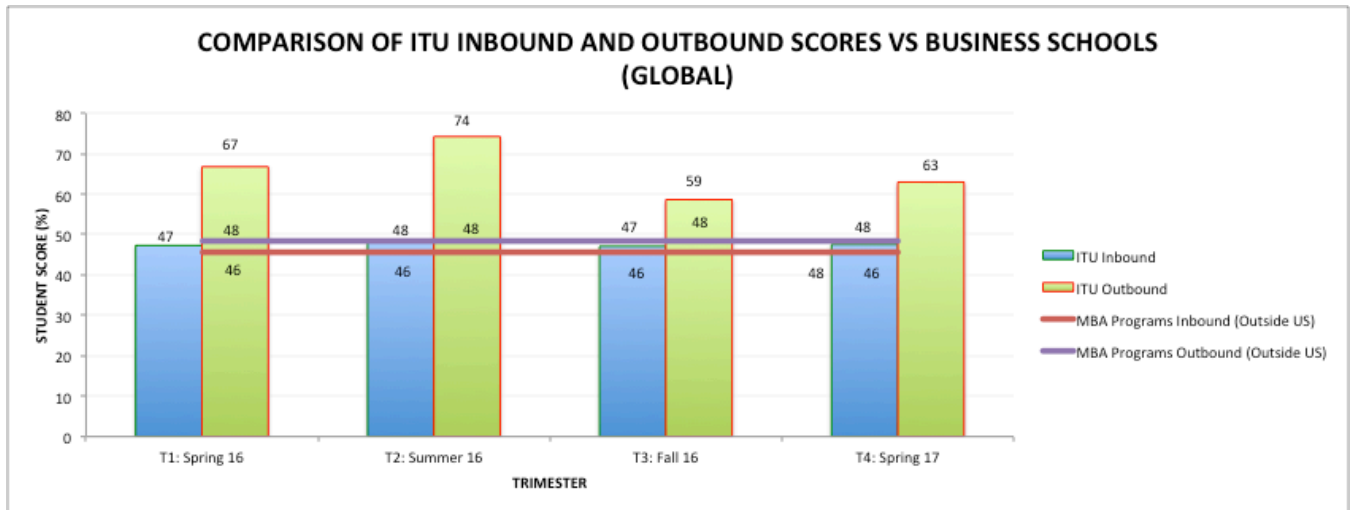
- ITU belongs to Region 7 or the Western Council (US) for the purposes of ACBSP accreditation of its business degrees. An analysis of ITU along with ACBSP Region 7 business students' performance on the inbound exams reveals that ITU students perform on par with the ACBSP Region 7 average of 48%. This average for ACBSP Region 7 schools is a rolling four year average of inbound exam scores for all ACBSP Region 7 accredited schools in the US that are registered with Peregrine to administer these exams to their students. Most ITU students come into their Masters program with an average level of knowledge, which is consistent with the average for most schools in the Western Region of the United States, including the state of California. As previously mentioned, it would be

interesting to observe how this trend changes if ITU students were to face a penalty of some sort for sub-optimal performance.

- On the outbound exams, ITU students perform much better (59% - 74%) than the ACBSP Region 7 average of 54%. This average for ACBSP Region 7 schools is a rolling four year average of outbound exam scores for all ACBSP Region 7 accredited schools in the US that are registered with Peregrine to administer these exams to their students. This reveals that while most ITU students come into their Masters program with an average level of knowledge, their level of education and opportunities dramatically improved due to the education provided to them during their Business degrees and Internships at ITU. Currently, there is no penalty for sub optimal performance on the outbound exam. However, the Business Department will provide recommendations on competency enhancement to the student with sub optimal performance. But since students are graduating, it is hard to monitor students' completion of these modules.



- ITU is categorized as a private not-for-profit educational institution. An analysis of ITU along with other business students from similar private, not for profit educational institutions on the inbound exams reveals that ITU students perform slightly better than their counterparts in other not for profit schools who had an average of 46%. This average for Private not for profit schools is a rolling four year average of inbound exam scores for all Private not for profit schools in the US that are registered with Peregrine to administer these exams to their students. Most ITU students come into their Masters program with an average level of knowledge, which is consistent with the average for most schools comparative pool. As previously mentioned, it would be interesting to observe how this trend changes if ITU students were to face a penalty of some sort for sub-optimal performance.
- On the outbound exams, ITU students perform much better (59% - 74%) than the average for private and not for profit institutions of 53%. This reveals that while most ITU students come into their Masters program with an average level of knowledge, their level of education and opportunities dramatically improved due to the education provided to them during their Business degrees and Internships at ITU.



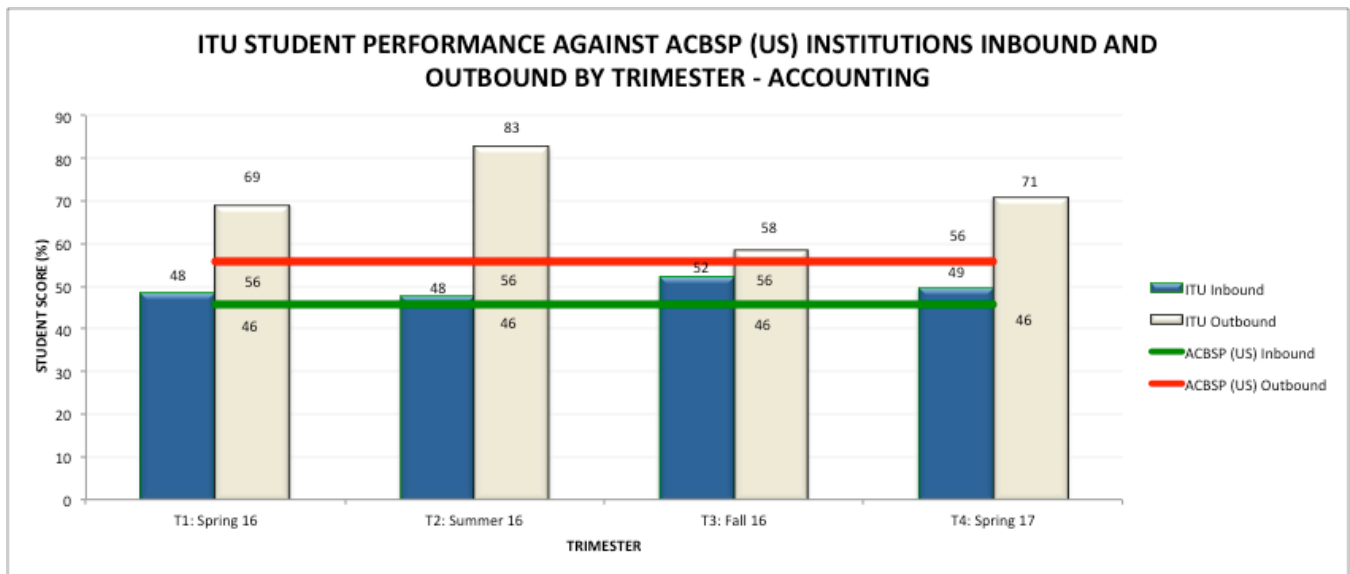
- As part of its ongoing commitment to program quality and excellence, the Business Department at ITU benchmarks its programs to globally recognized and accredited business programs and schools. ITU students' performance on the Peregrine exams is also benchmarked against global business programs. An analysis of the ITU versus global business programs on the inbound exams reveals that ITU students perform slightly better than their counterparts in global business programs who had an average of 46%. This average is a rolling four year average of inbound exam scores for all business degree schools that are registered with Peregrine to administer these exams to their students. Most ITU students come into their Masters program with an average level of knowledge, which is consistent with the average for most schools in the comparative pool. As previously mentioned, it would be interesting to observe how this trend changes if ITU students were to face a penalty of some sort for sub-optimal performance.

- On the outbound exams, ITU students again outperform (59% - 74%) the comparative pool with an average of 48%. This reveals that while most ITU students come into their Masters program with an average level of knowledge, they receive level of education and opportunities that are far superior than most of their counterparts across the world leading to dramatically improved results at the end of their business degrees at ITU.

8.0 Comparison of performance on knowledge areas

As explained in the introduction to this report, students taking the Peregrine inbound and outbound exams are tested along key knowledge areas that are critical to their careers in the area of business, regardless of their specializations. The knowledge areas and their component sub topics are listed in the table above. In this section, we will analyze how ITU students performed internally (between trimesters and between inbound and outbound exams) and externally (comparing to ACBSP accredited US schools).

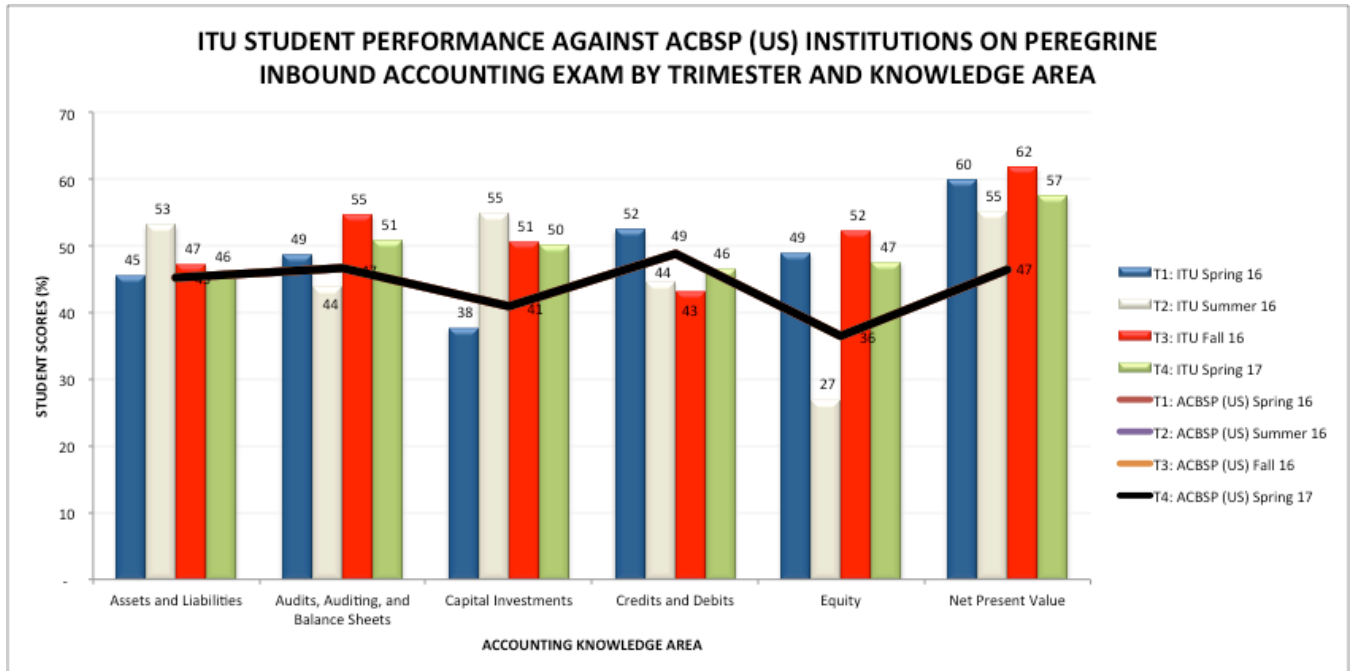
1. Accounting



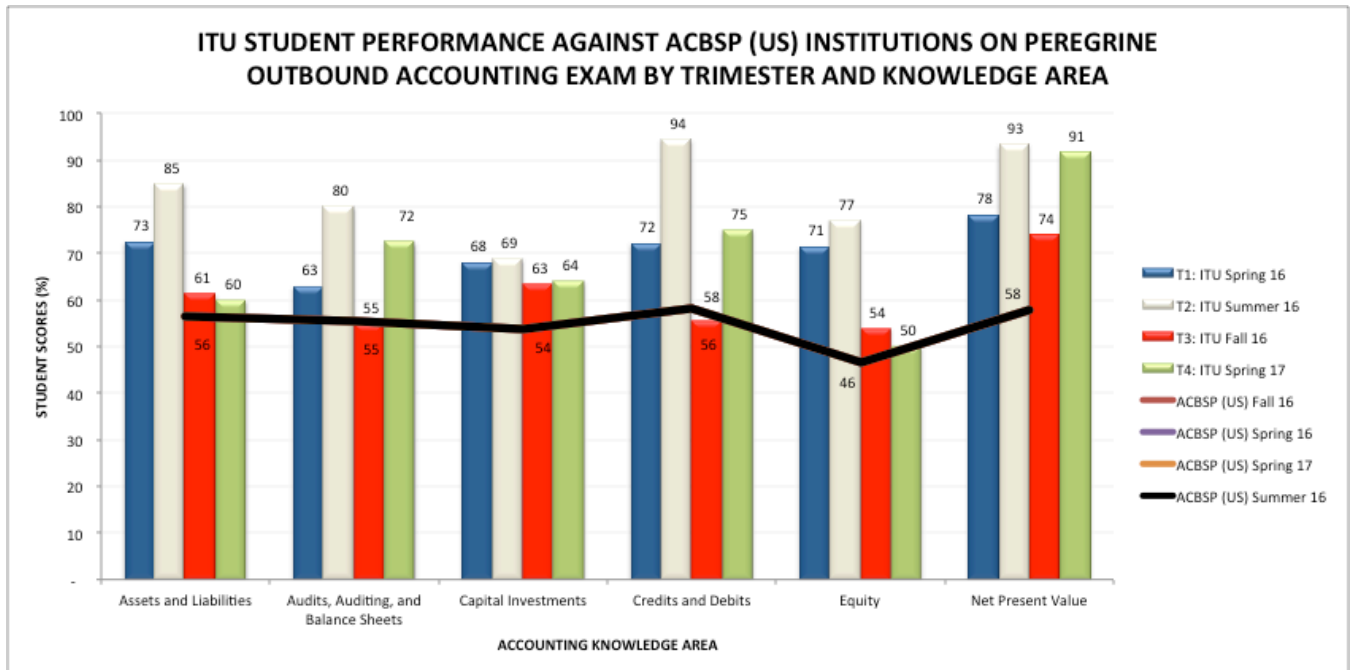
- Accounting is among the most popular foci for ITU business students. Also, most students come to ITU with prior coursework and/or work experience in accounting. Many of them also display an interest in professional certifications as CPA's, CFAs, and others during the course of the internship program as they study towards their MBA degree at ITU. This interest and experience with accounting is evident in the results of the inbound exams. Students display a performance on the inbound exams far ahead of the ACBSP (US) average. Their coursework in Accounting at ITU only serves to strengthen their knowledge as evidenced by the spectacular performance on the outbound exam. ITU students also far outperform the ACBSP (US) average for accounting. This could be explained by rigorous coursework at ITU,

knowledgeable, certified industry practitioners as faculty and students' own experiences through work and course relevant internships.

- It was previously mentioned that there are several sub components to each knowledge area. While it is evident that ITU students are on the upward trend both internally and externally, it is important to understand which areas of accounting are particular strengths and/or which areas require attention. The following graphs aim to expand this understanding.

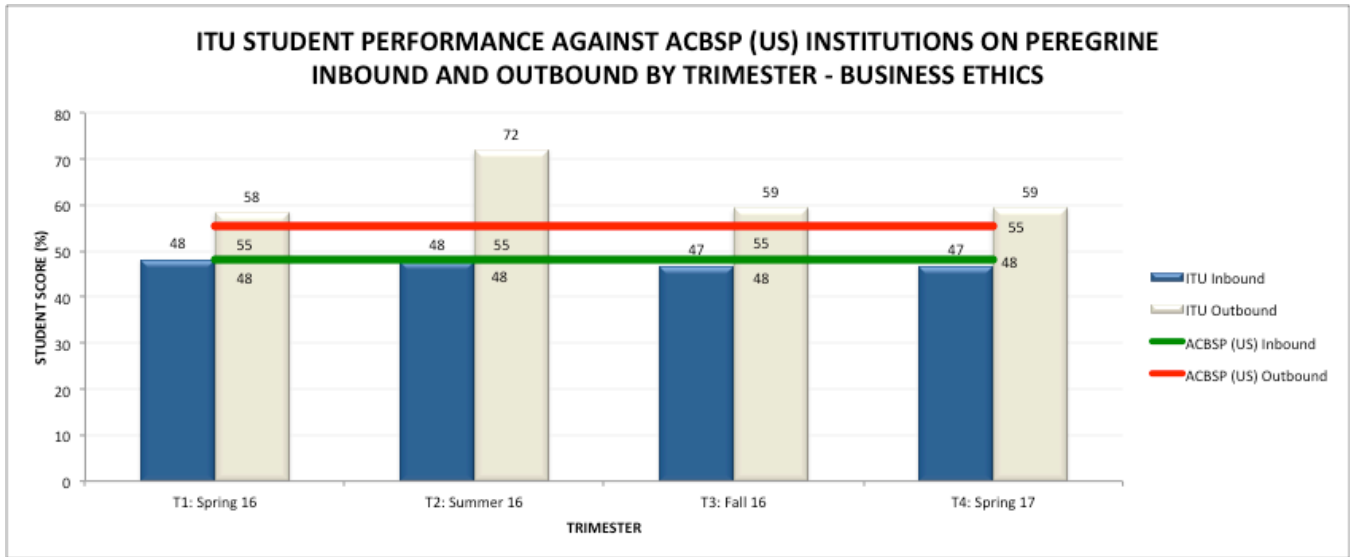


- In general, across trimesters, students come to ITU with a good understanding of the Net Present Value concept. Across trimesters, this area has seen the highest scores on the Inbound exam. Other areas such as Credits and Debits, Auditing, Balance Sheets, Assets and Liabilities see average performance. Equity and Capital Investments may require a little more attention as students generally seem to perform slightly lower than other accounting areas. Overall, ITU students perform mostly above the ACBSP (US) average for accounting as indicated by the black trend line on the graph above.

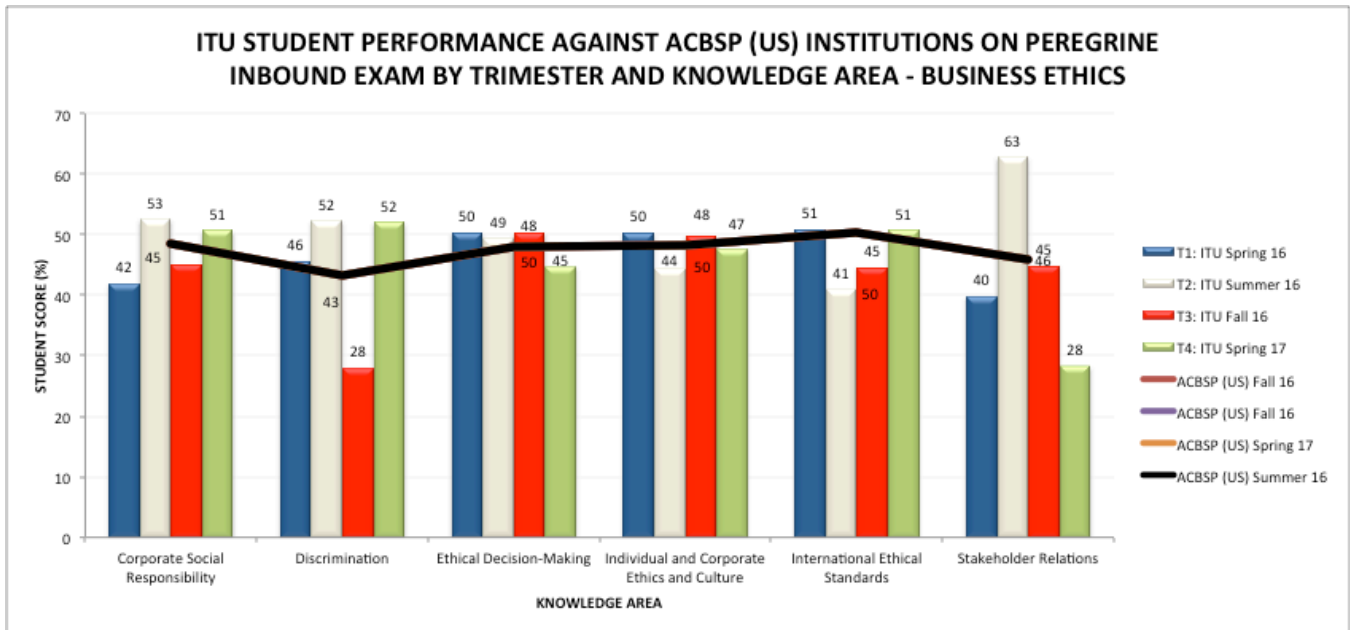


- ITU Students, through their business coursework at ITU, seem to gain a superior understanding of accounting concepts and application. Their accounting outbound exam displays exemplary performance in all areas in comparison to the Inbound Exams as well as in comparison to the ACBSP (US) average. Net Present Value shows drastic improvements as does understanding of Credits and Debits, Auditing and Assets and Liabilities. Equity and Capital investments, while better than the inbound exams, seem to be slightly lower scoring than the other accounting concepts. It would be recommended that specific coursework be included in these areas and/or remedial Peregrine modules be provided to students to improve these competencies.

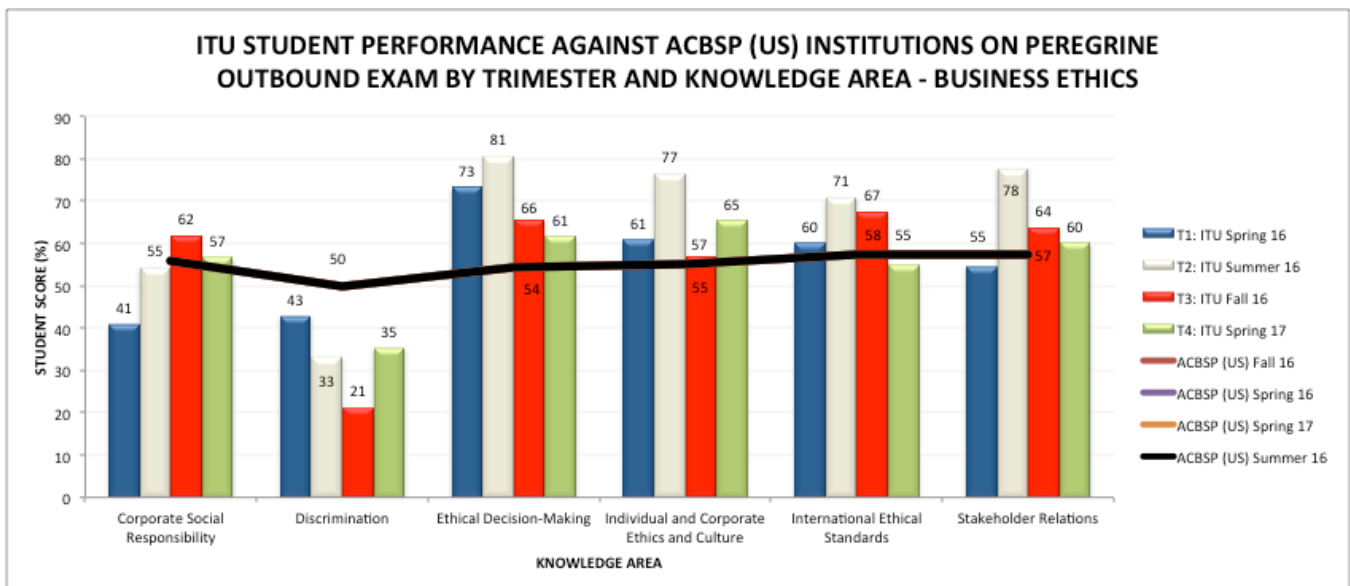
2. Business Ethics



- Business Ethics is an integral component fostered through coursework, and other activities at ITU. On the inbound exams, students display a performance on the inbound exams on par with the ACBSP (US) average. Their coursework at ITU only serves to strengthen their knowledge as evidenced by the spectacular performance on the outbound exam. ITU students far outperform the ACBSP (US) average for business ethics. This could be explained by rigorous coursework at ITU, knowledgeable, certified industry practitioners as faculty and students' own experiences through work and course relevant internships that encourage ethical conduct in business.
- It was previously mentioned that there are several sub components to each knowledge area. While it is evident that ITU students are on the upward trend both internally and externally, it is important to understand which areas of business ethics are particular strengths and/or which areas require attention. The following graphs aim to expand this understanding.

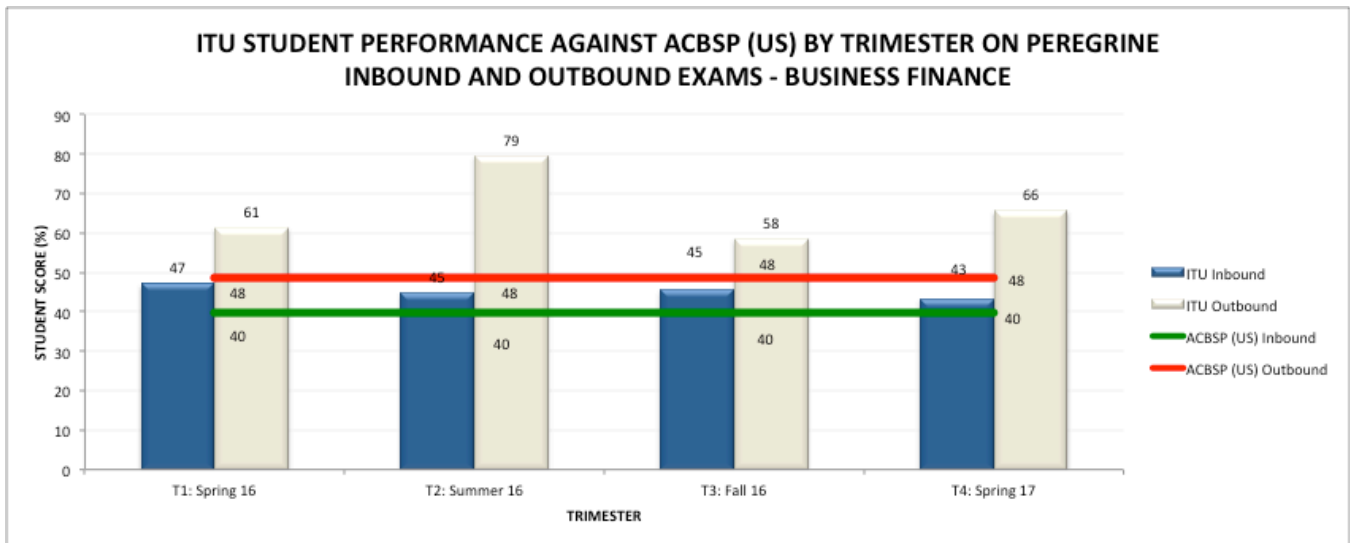


- On the inbound exams for Business Ethics, ITU students performed on par and even outperformed the ACBSP (US) average on some aspects of Business Ethics. Examples are Corporate Social Responsibility, Discrimination and Stakeholder Relations. This could be because ITU students come into their business degrees with some work experience, which enables them to understand the topics successfully. However, the area of Stakeholder Relations has seen volatile performance among ITU students between one trimester and the next. It would also be interesting to see if the levels of performance improve with the imposition of penalties for sub optimal performance.

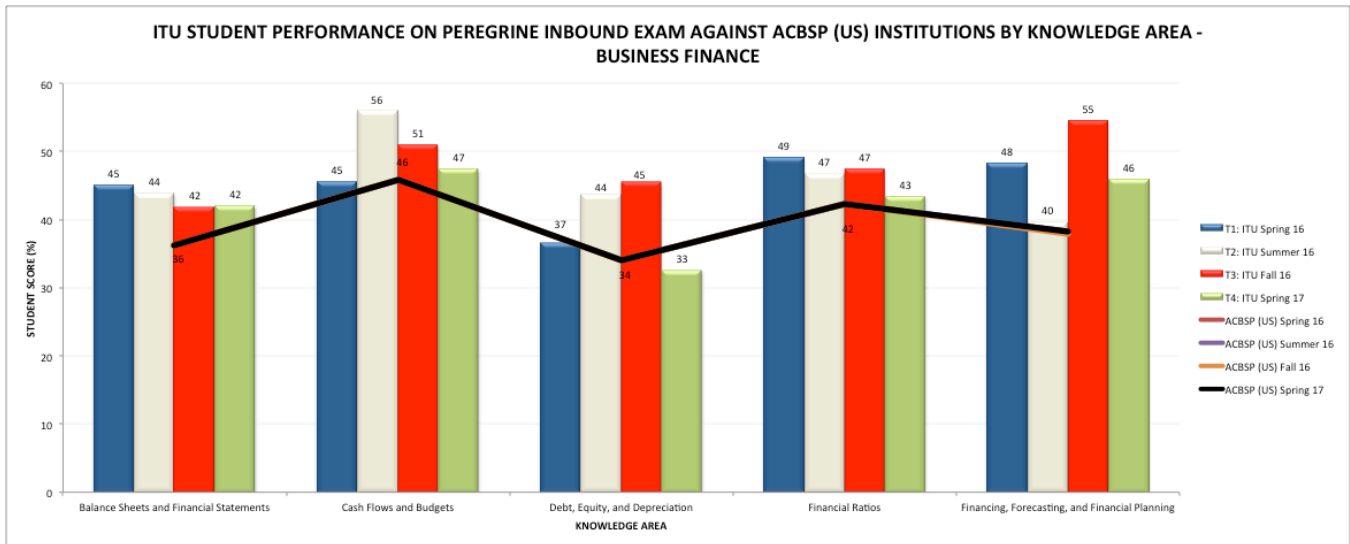


- The results of the outbound exams for Business Ethics were slightly surprising. While, on the whole, ITU students still manage to outperform the ACBSP (US) average in most areas, Corporate Social Responsibility and Discrimination are topics that are not very well understood by students even at the end of their business degrees at ITU. In fact, performance on these two (2) topics fell below the ACBSP (US) average and also either remained the same as the inbound or fell from the inbound exam performance. ITU students however, displayed a marked improvement on other areas such as Ethical Decision Making, Stakeholder Relations and others.

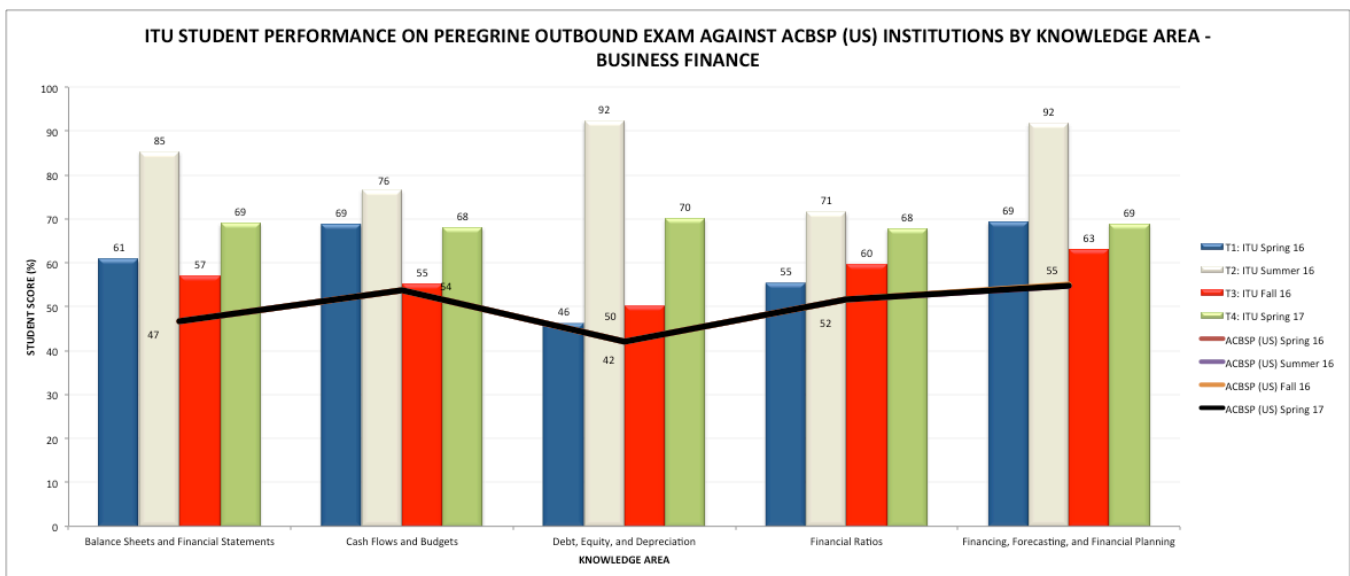
3. Business Finance



- Like Accounting, Business Finance is among the popular study choices for students pursuing an MBA at ITU. Particularly, students come to ITU with prior coursework and/or work experience in finance and related fields. In general, ITU students perform well above the ACBSP (US) average of 40% on the inbound Business Finance exams. ITU students also perform significantly better on the outbound exams than the inbound exams from trimester to trimester. The excellent quality of ITU's faculty and business degrees is evident in the comparison between ITU outbound students and the ACBSP (US) outbound average of 48%. ITU students far outperform the national average.



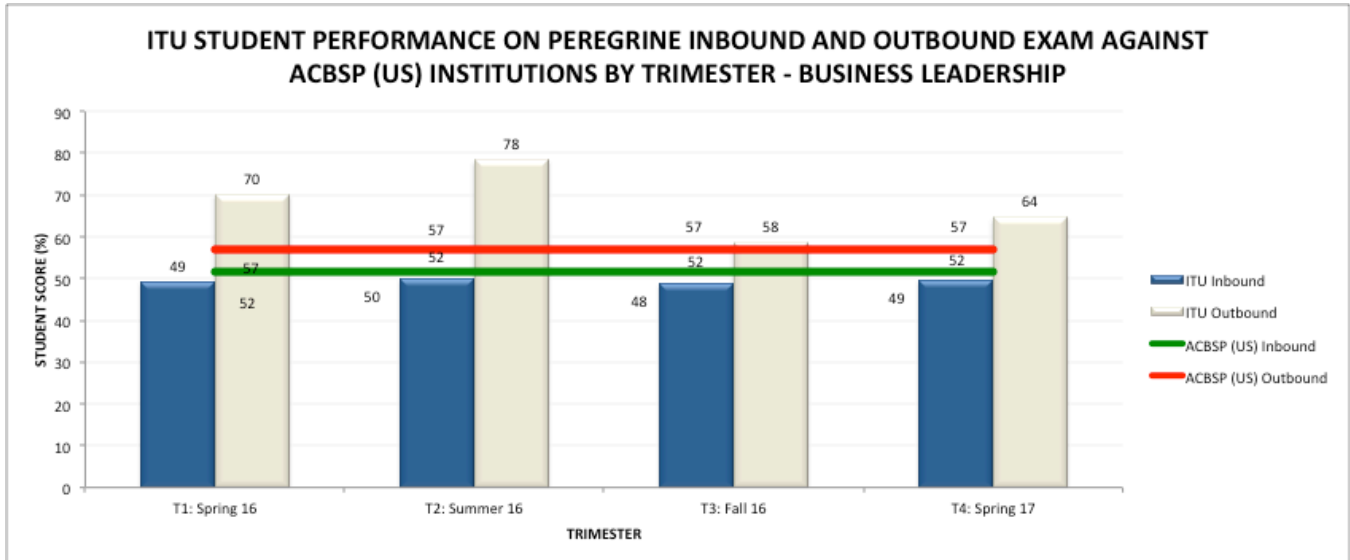
- On the Finance Inbound Exam, ITU students generally performed better than their counterparts in other ACBSP (US) institutions. Strong performances were noted in the areas of Cash Flows and Budgets, Debt, Equity and Depreciation, Financial Ratios, Financing, Forecasting and Financial Planning. However, ITU students may benefit from getting a little more help with Debt, Equity and Depreciation.



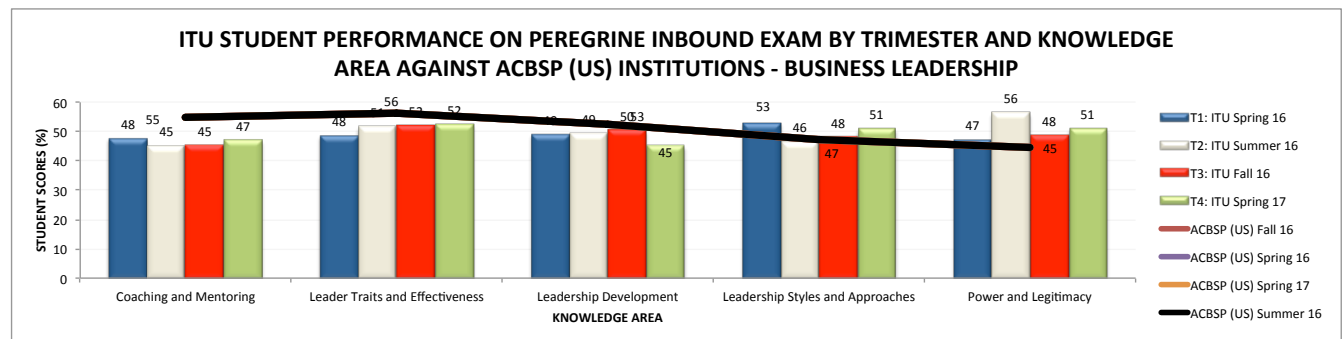
- On the Finance Outbound Exam, ITU students generally performed better than their counterparts in other ACBSP (US) institutions. Strong performances were noted in the areas of Cash Flows and Budgets, Financial Ratios, Financing, Forecasting and Financial Planning. However, ITU students may benefit from getting a little more help with Debt, Equity and Depreciation as this area has resulted in certain volatility between the performance on the

inbound and outbound exams. Balance Sheets and Financial Statements and Financial Forecasting and Planning are areas of strength for ITU students.

4. Business Leadership

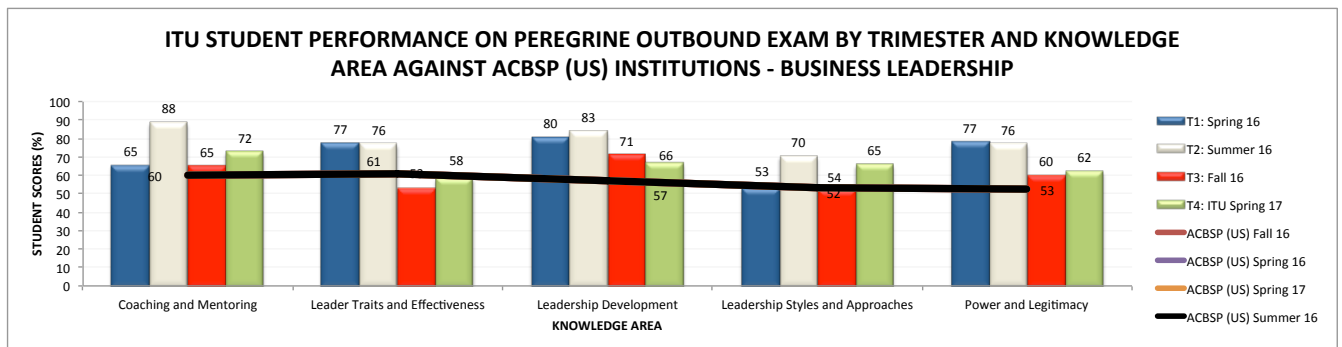


- Business Leadership (Organizational Leadership Theories, at ITU) is among four (4) core courses required by all students enrolled in ITU's MBA program. Overall, ITU students perform much better on the outbound exam than the inbound exam. In comparison with the ACBSP (US) average, ITU students perform just slightly below their counterparts. However, due to the education they receive at ITU, they far outperform the rolling average displayed by their ACBSP (US) counterparts on the outbound exam.



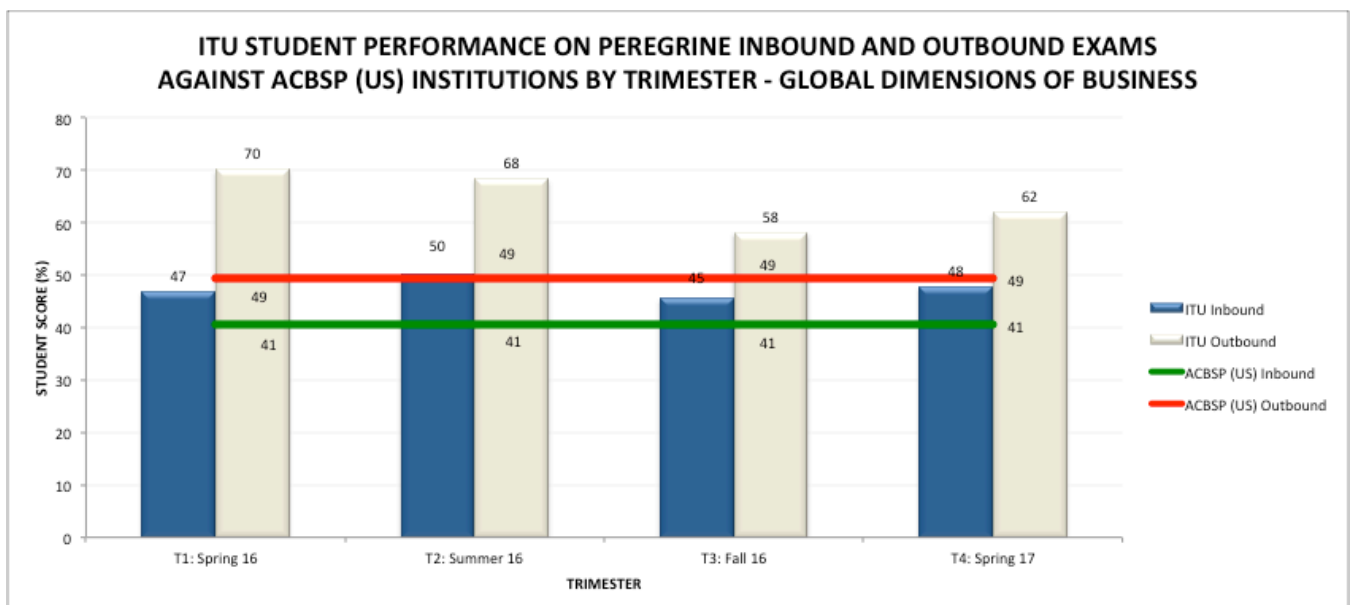
- On the inbound exams in the Leadership module, it was noticed that ITU students performed above the ACBSP (US) average on two (2) leadership sub topics; Leadership Styles and Approaches and Power and Legitimacy. This is consistent with our observation that ITU students come into their MBA degrees with prior work experience and understanding of leadership styles, power and legitimacy. Conversely, subpar performance was also noted in areas such as Coaching and Mentoring, Leader Traits and Effectiveness, and Leadership

Development. Again, this is understandable as these areas are more complex leadership topics.



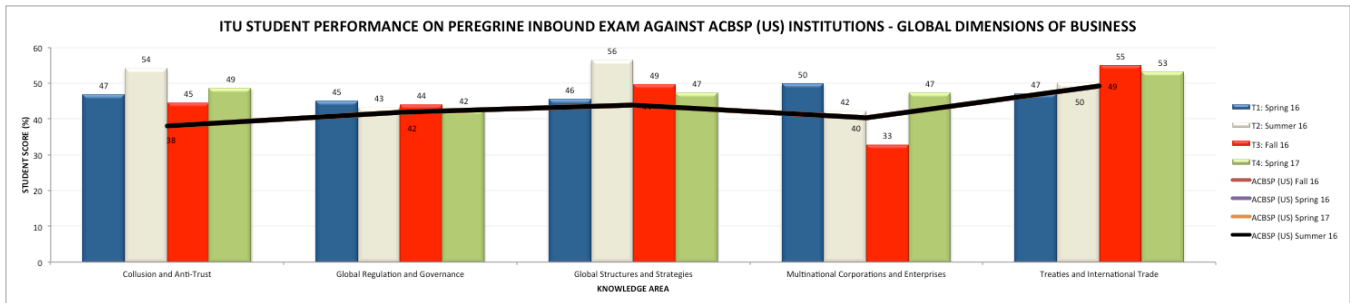
- The trend noticed on the inbound exams is much improved on the outbound exams. It must be noted here that ITU students in general and ITU MBA students in particular are encouraged to take part in various campus clubs such as Toastmasters which enable students to practice and be rewarded for practicing and modeling effective leadership skills. In addition, courses in Leadership, Project Management and others help students understand leadership from a theoretical standpoint in a better manner. This is evident in the drastically improved performance in all areas of leadership.

5. Global Dimensions of Business

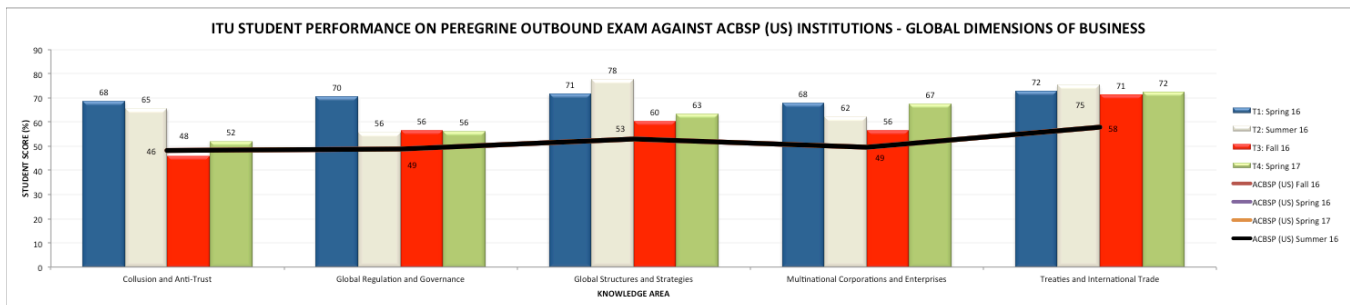


- Global Dimensions of Business is an integral part of business degrees at ITU. This involves an understanding of regulation, global business structures, workings of multi-national enterprises and international trade among other things. As previously mentioned, students

come to ITU with some degree of local work experience with large and/or multinational enterprises. Yet others come into their degrees with some amount of international work experience. This awareness of facets of global dimensions of business is evident in ITU students' inbound exam scores. These exam scores are well above the ACBSP (US) average. Students' time at ITU and their business degrees help them significantly improve these competencies as evidenced by their outbound exam scores in comparison with their inbound scores and the ACBSP (US) average for outbound exams.

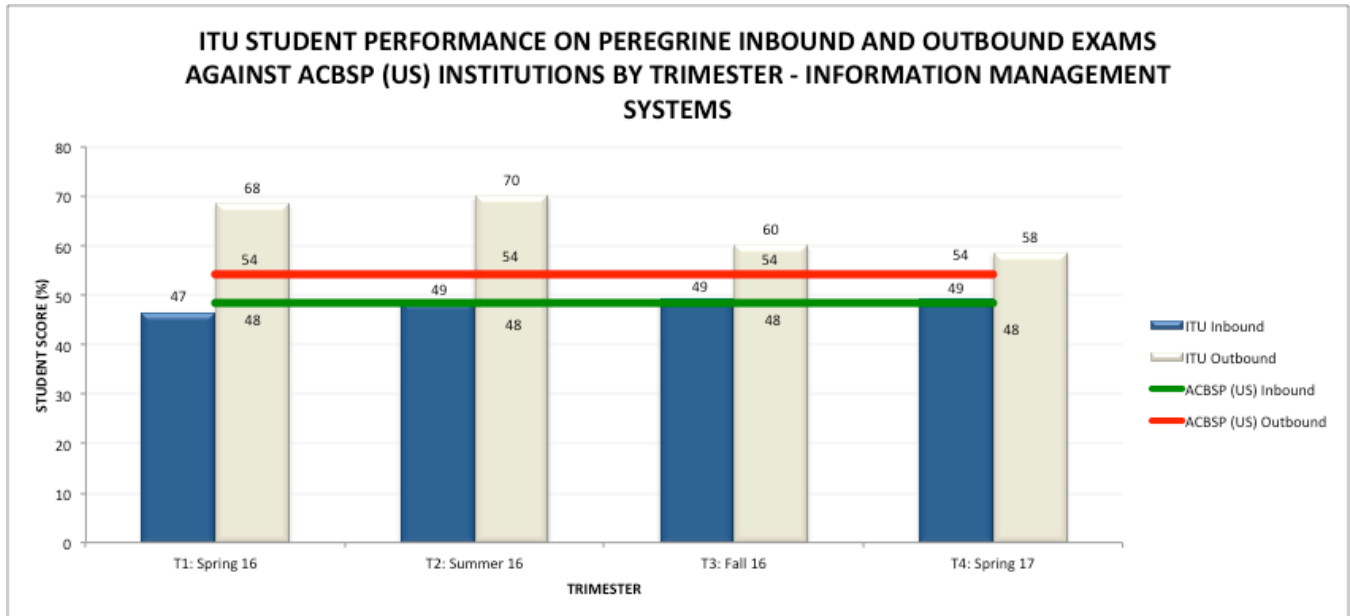


- As previously mentioned, ITU students perform on par and in some cases, even better than the ACBSP (US) average on the inbound exams for global dimensions of business. Particular areas of strength include Treaties and International Trade, Collusion and Anti-Trust, and Multinational Corporations and Enterprises.

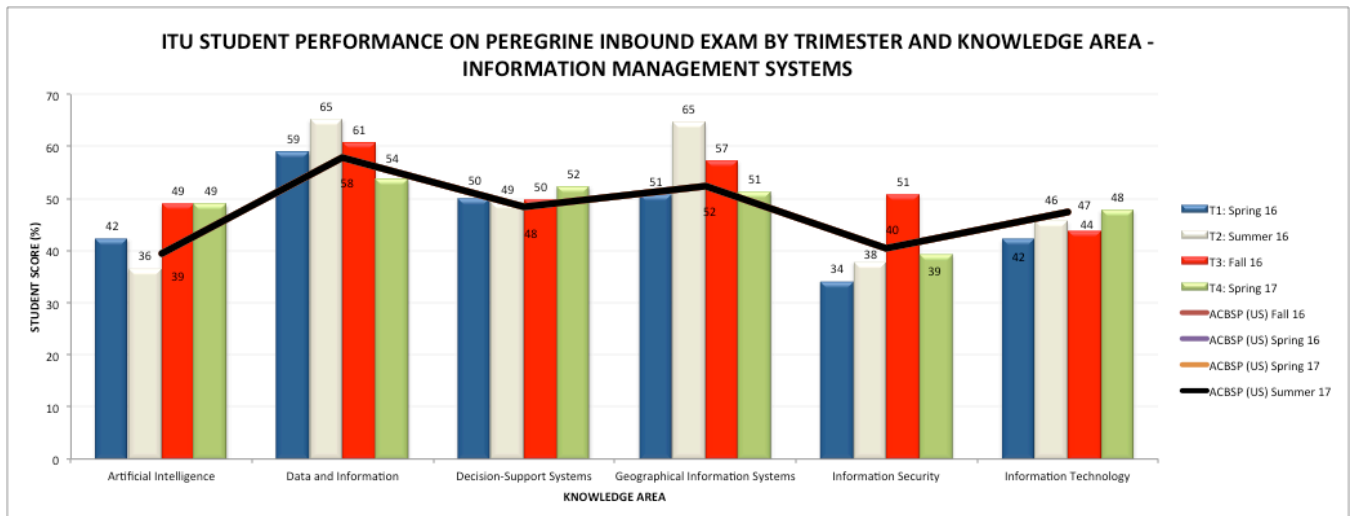


- The areas of strength mentioned in the inbound exams for global dimensions of business, are further strengthened as a result of the student's journey through their MBA program. ITU students outperform the ACBSP (US) average on all knowledge areas that comprise Global Dimensions of Business.

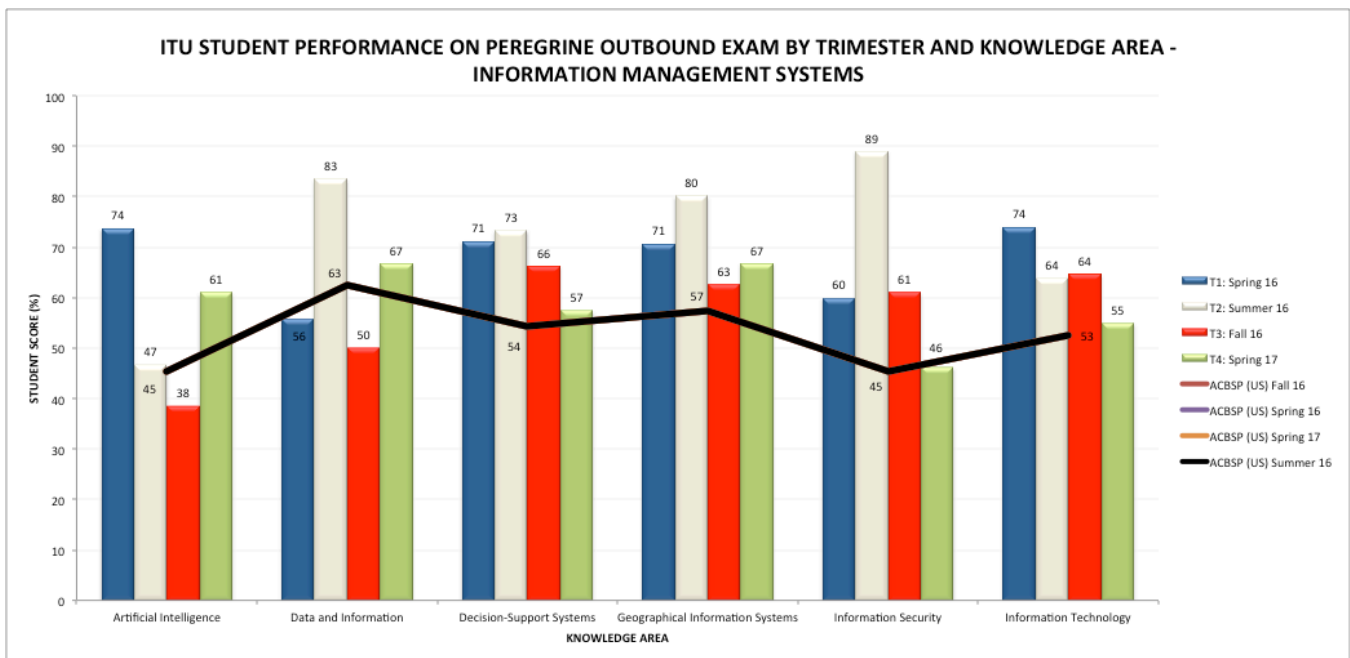
6. Information Management Systems



- Information Management Systems (IMS) is an integral part of business degrees at ITU. This involves an understanding of concepts such as Artificial Intelligence, Data and Information, Decision Support Systems, Information Systems, Information Security and Information Technology. Like Accounting and Finance, Information Management Systems and allied courses are popular choices with ITU students. Some students even enter the MBA program with previous Masters degrees in Computer Engineering, Software Engineering and allied fields. As a result, students score on par or slightly above ACBSP (US) average for IMS inbound exams. ITU also, as part of its MBA program, offers courses in Enterprise Resource Planning (ERP) using SAP, Data Mining, Business Intelligence and others. As a result of graduating from the MBA program at ITU, students far outperform the ACBSP (US) average for IMS outbound exams.

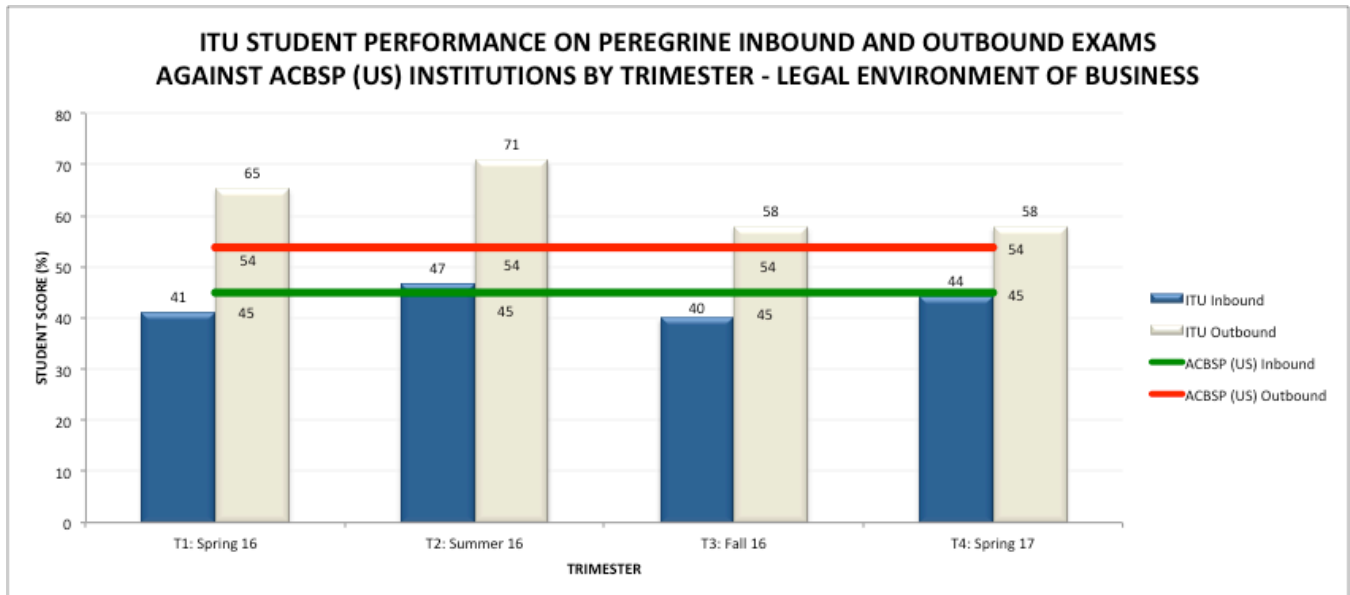


- As is to be expected, ITU students come into their MBA degrees with a fairly good understanding of IMS concepts as evidenced by their performance on the inbound exam in comparison to the ACBSP (US) average. Some areas of concern noted were Information Security, and Information Technology where students performed below the average on three (3) trimesters out of four (4).

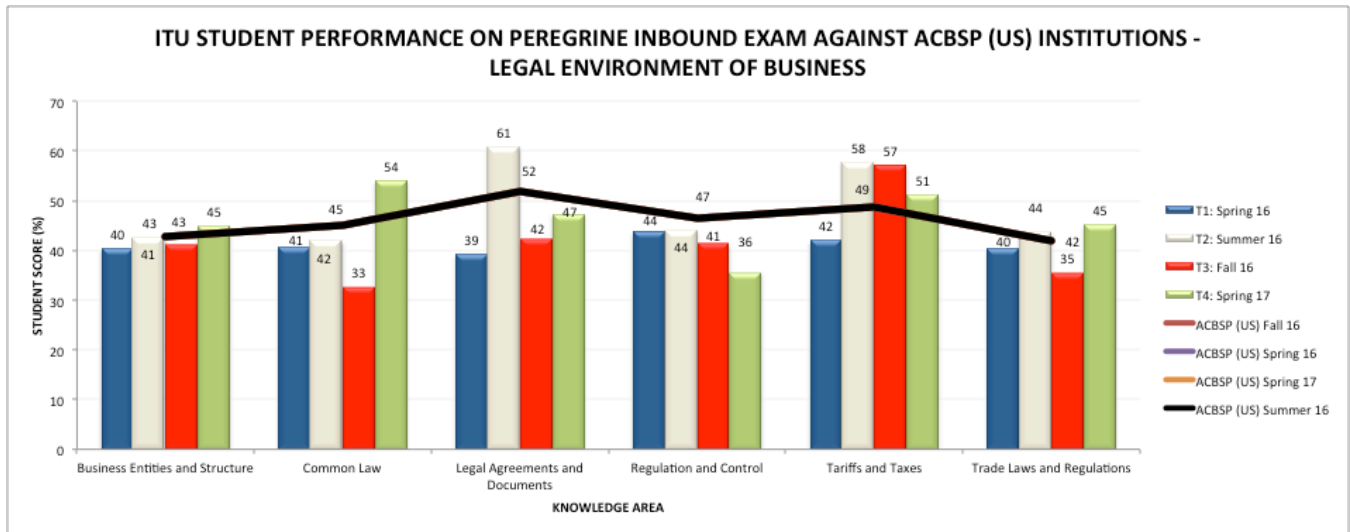


- The trends of certain areas of poor performance noted on ITU students' inbound exams (Information Security and Information Technology) showed dramatic improvements on the outbound exams. This is true when compared with the ACBSP (US) average too. However, some volatility is observed in results between trimesters leading to the question about teaching methodologies, and general volatility in student capabilities from trimester to trimester.

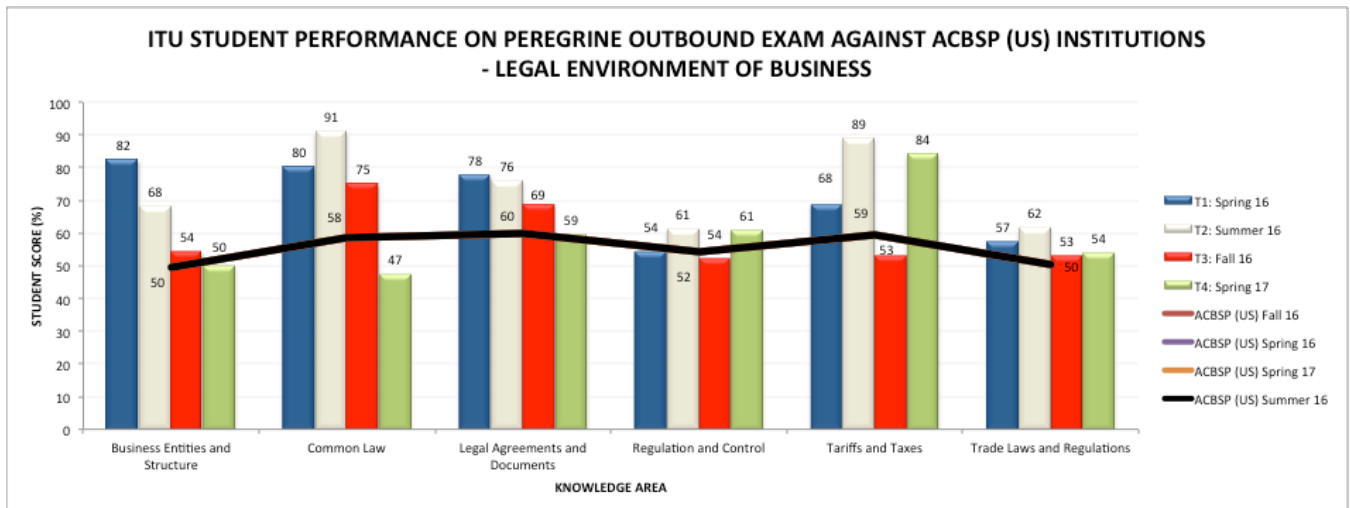
7. Legal Environment of Business



- In general, ITU students perform slightly below average on the inbound exams for this module. Given that a large proportion of students come to ITU's MBA program from other countries, it may be possible that this performance is due to the legal environments of business being different the world over. As students graduate from their MBA programs at ITU, their outbound exam scores are dramatically improved; both in comparison to the ACBSP (US) average and in comparison to the inbound exam scores. This implies that students gain a better understanding of the legal implications of business, as they pertain to the United States as they progress through their degrees at ITU.

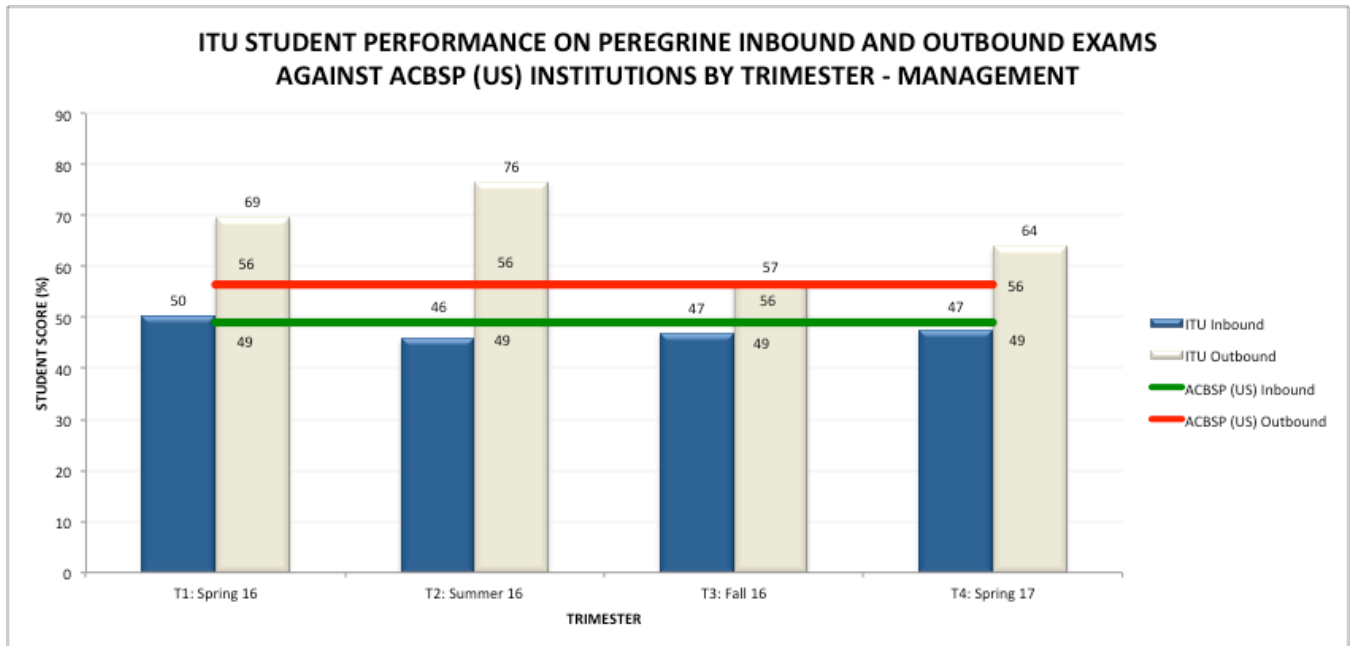


- Generally, incoming ITU students had an average understanding (in comparison with the ACBSP national) on almost all aspects of law as it pertains to the United States. Regulation and Control, Common Law and some aspects of Trade Laws seem to be areas of difficulty for incoming ITU students.



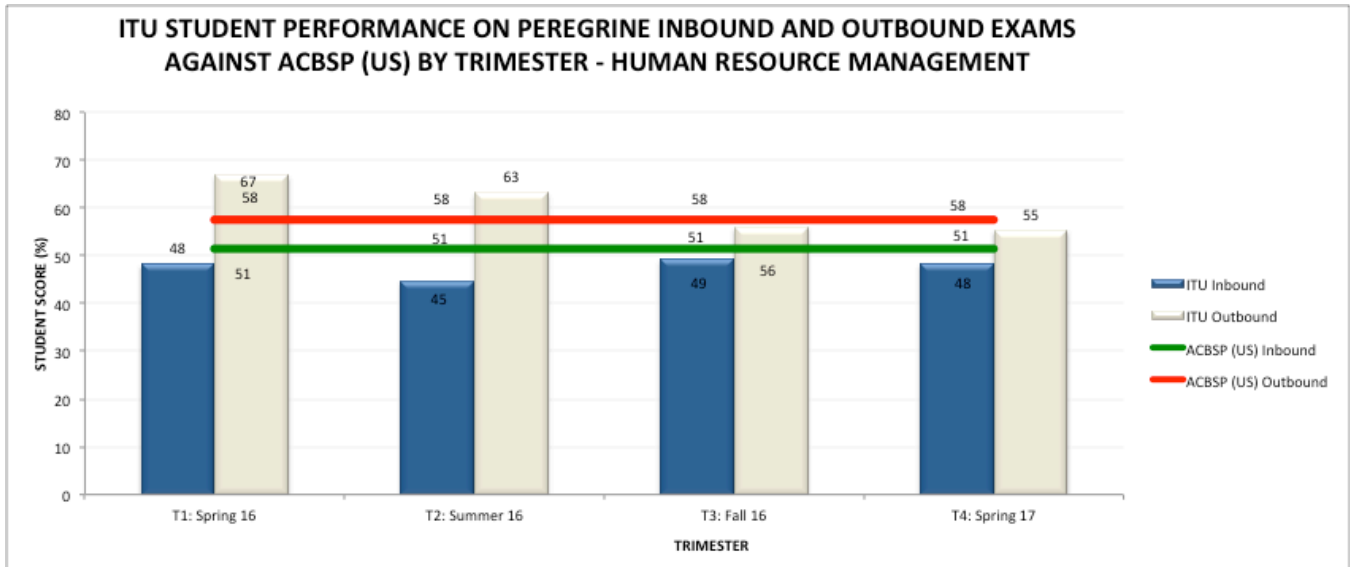
- From the outbound exam graphs for the Legal Environment of Business, it is evident that ITU students, once again perform better than they did on the inbound exams and in comparison with the ACBSP (US) average. Highlights include ITU students' performance on Common Law, Tariffs and Taxes, and Business Entities and Structure. Some volatility was noted in student performance from trimester to trimester in the same areas. In general, ITU students display a good grasp of legal concepts as they pertain to businesses in the US as a result of their MBA degrees at ITU.

8. Management

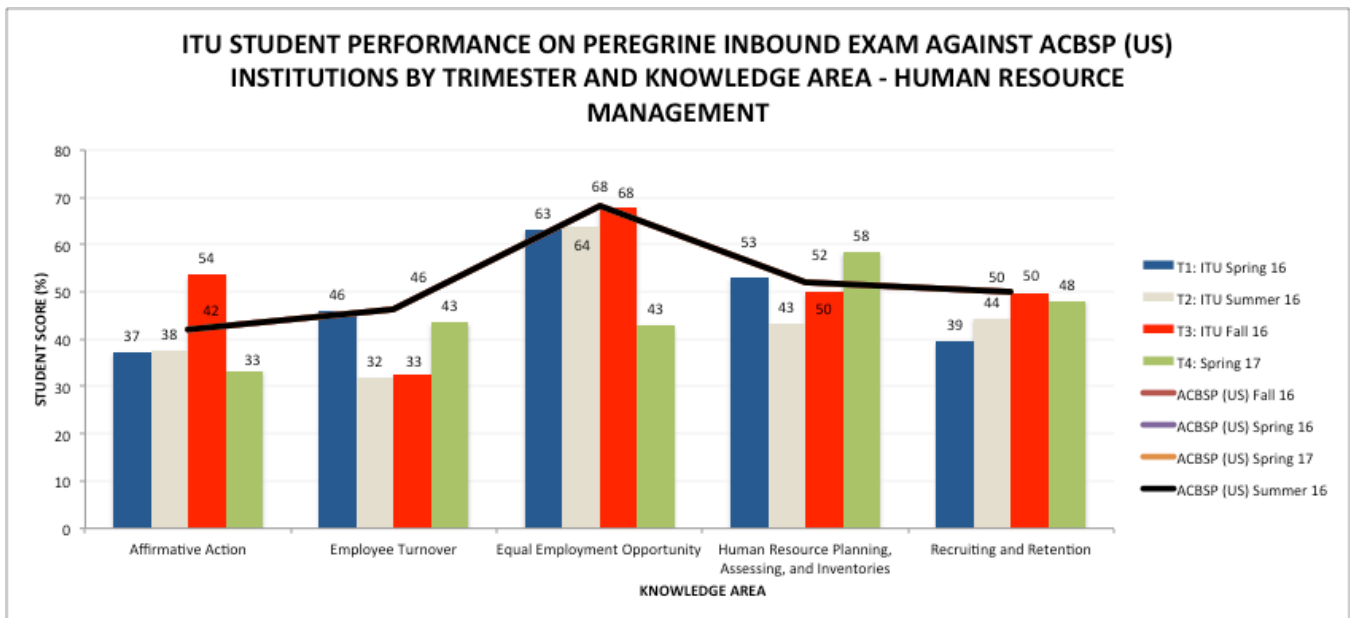


- Management as a broad knowledge area, and comprises several sub specialties such as Human Resource Management, Product Operations Management, and Organizational Behavior. These sub specialties are further broken down into individual topics for testing purposes. From a broad perspective, ITU students perform at par or slightly below the ACBSP (US) average for inbound exams in Management. With the exception of Fall 2016, ITU students outperform their ACBSP (US) counterparts on the outbound exam. The following sections break down the Management knowledge area into its component topics and subjects for further analysis and comparisons.

a. Human Resource Management

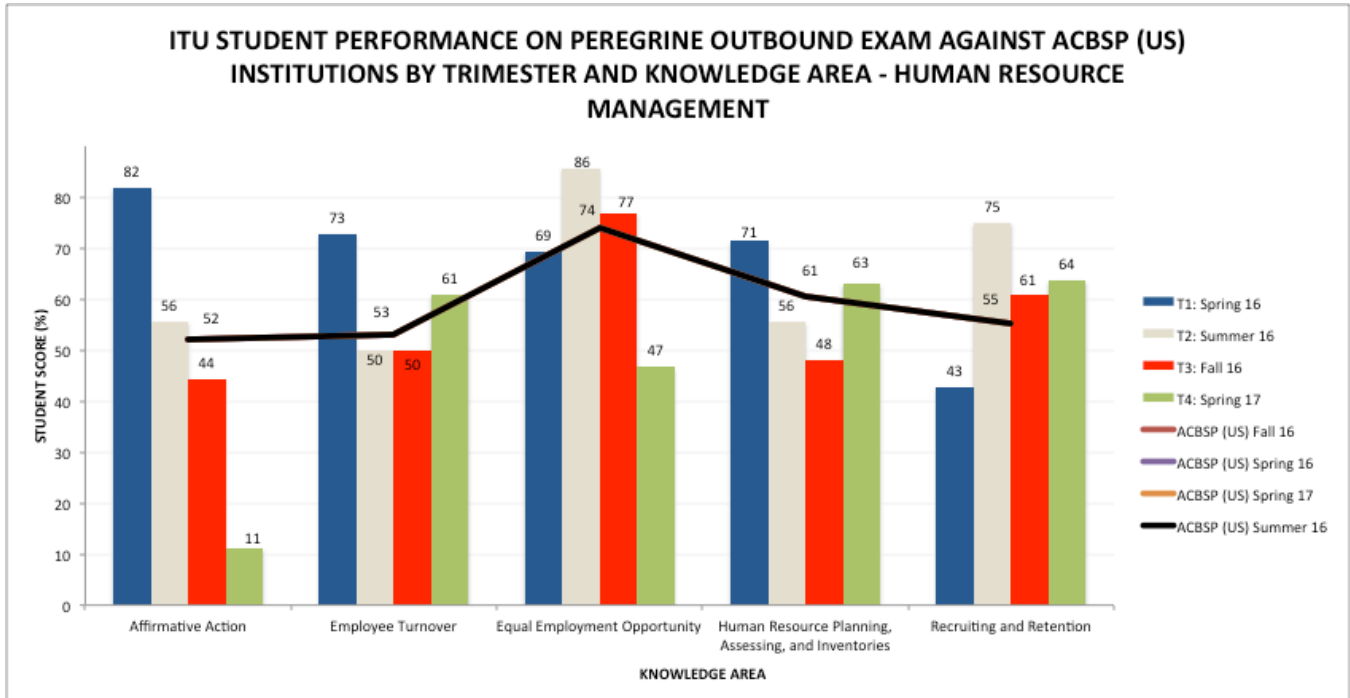


- Human Resource Management (HRM) is a subset of the Management knowledge area. Incoming ITU students performed slightly under the ACBSP (US) average for inbound exams. On the outbound exams however, ITU students outperform the ACBSP (US) average. Although ITU students do perform better on the outbound exams than they do on the inbound exams, it is recommended that students put time and effort into answering the questions. A trend of declining performance has been noted from term to term. This could be because of the lack of penalties for sub optimal performance.



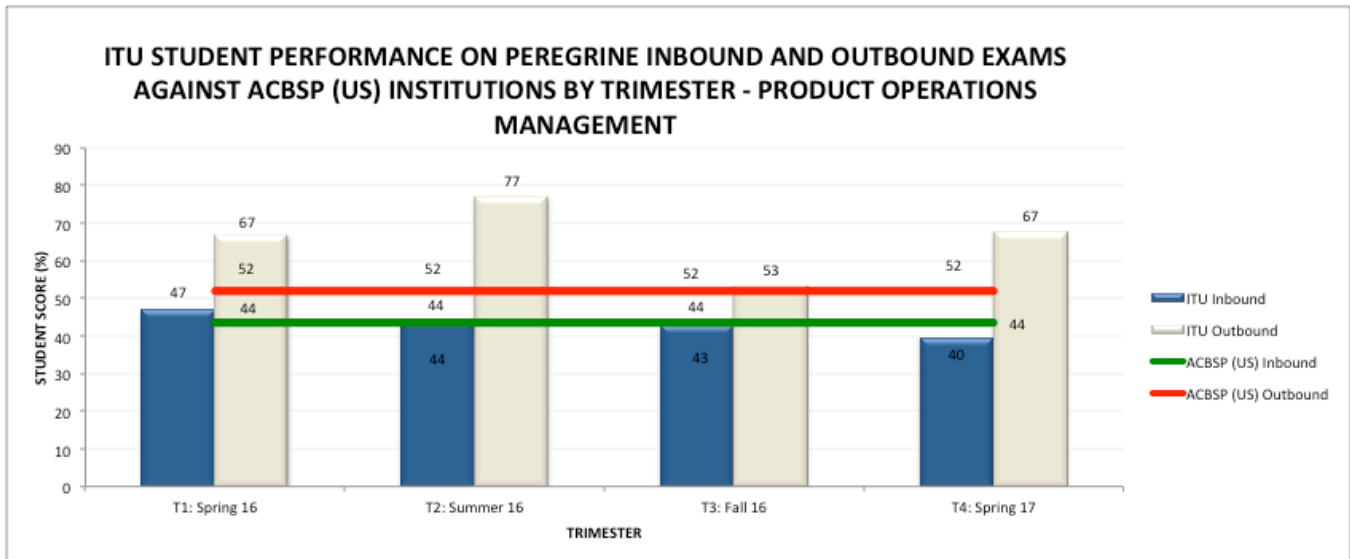
- On the whole, we previously noted that ITU students were either on par or slightly below the ACBSP (US) average for HRM inbound exams. Specific areas that require attention are

Affirmative Action, Employee Turnover, Human Resource Planning, Assessing and Inventories, and Recruiting and Retention. As previously mentioned, it would be interesting to note if student performance is improved due to penalties imposed on sub optimal performance. ITU students, on the whole, however do have a good understanding of Equal Employment Opportunity and its facets.

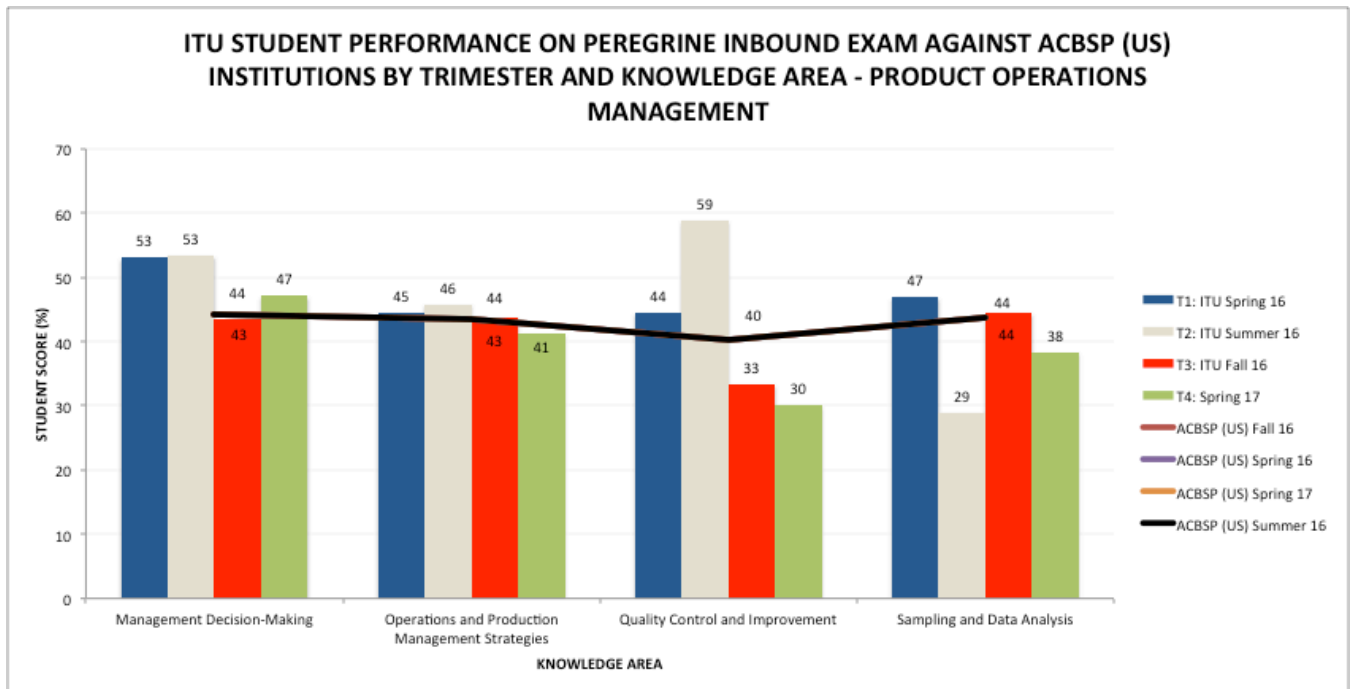


- ITU student performance was much better on the outbound exam than on the inbound exam for HRM. This is true for both internal comparison as well as comparison with the ACBSP (US) average. However, some attention needs to be directed at the volatility in ITU student performance in the various modules that comprise HRM. For example, Equal Employment Opportunity and Human Resource Planning, Assessing and Inventories show improved performance in comparison to the inbound exam as well as to the ACBSP (US) average for most part. However, there is no consistent trend of performance. This makes it slightly difficult to ascertain whether or not there is an issue with the level of HRM knowledge or if students may not have been giving the exams sufficient attention. Affirmative Action is a cause for concern due to the declining trend in student performance.

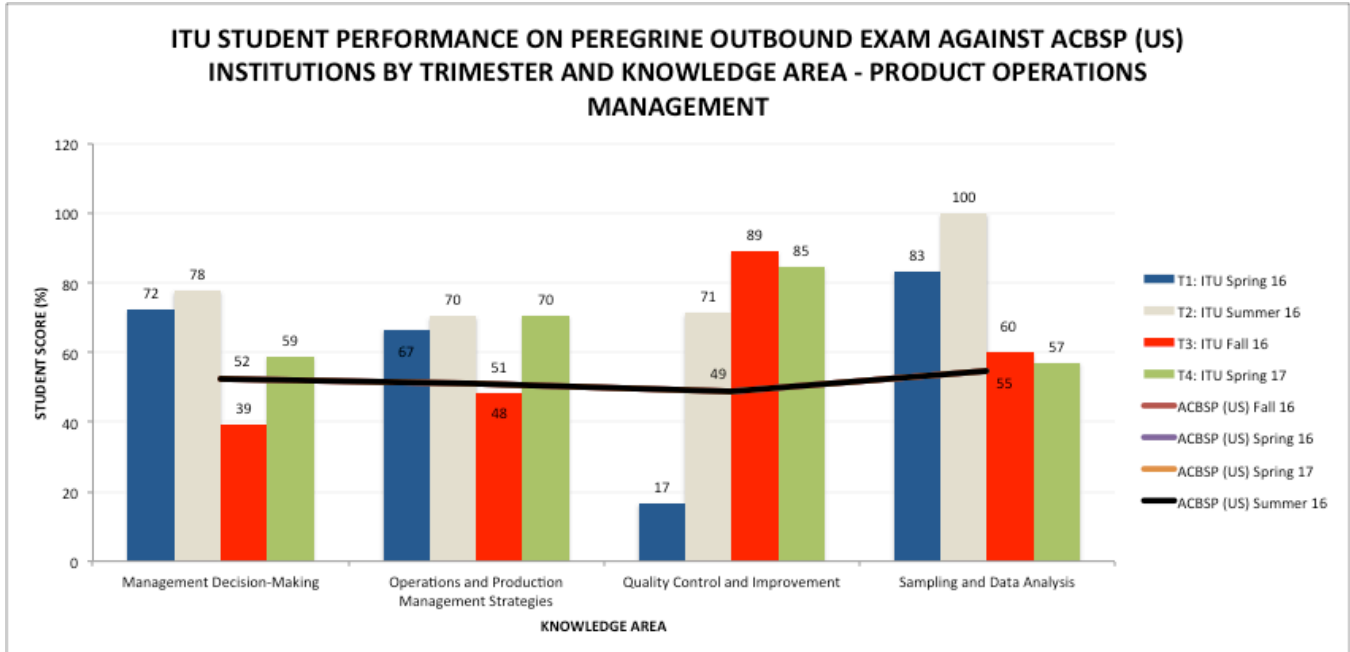
b. Product Operations Management



- Product Operations Management (POM) is a subset of the Management knowledge area. Incoming ITU students performed on par with the ACBSP (US) average for inbound exams. However, a trend of declining performance has been noted among ITU students from term to term. This has led to ITU being slightly below the ACBSP average for inbound exams in Fall 16 and Spring 17. On the outbound exams however, ITU students outperform the ACBSP (US) average. Although ITU students do perform better on the outbound exams than they do on the inbound exams, it is recommended that students put time and effort into answering the questions. Certain volatility has been noted in ITU outbound students' performance in POM from term to term. This could be indicative of students not paying sufficient attention to the exam.

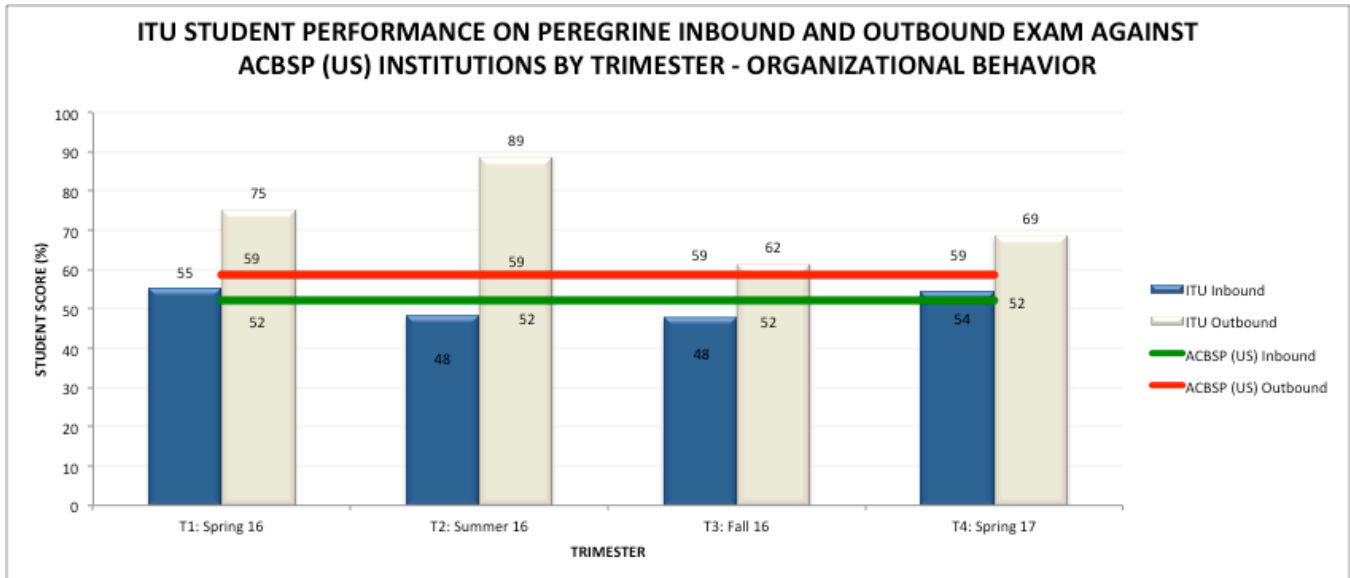


- On the whole, we previously noted that ITU students were generally on par with the ACBSP (US) average for POM inbound exams. Specific areas that require attention are Quality Control and Improvement. Further, areas such as Operations and Production Management Strategies and Quality Control and Improvement display a trend of declining performance from term to term. Sampling and Data Analysis also shows some volatility in performance from term to term. As previously mentioned, it would be interesting to note if student performance is improved due to penalties imposed on sub optimal performance. In general, ITU students do display a good understanding of Management Decision Making as they enter their MBA degrees.

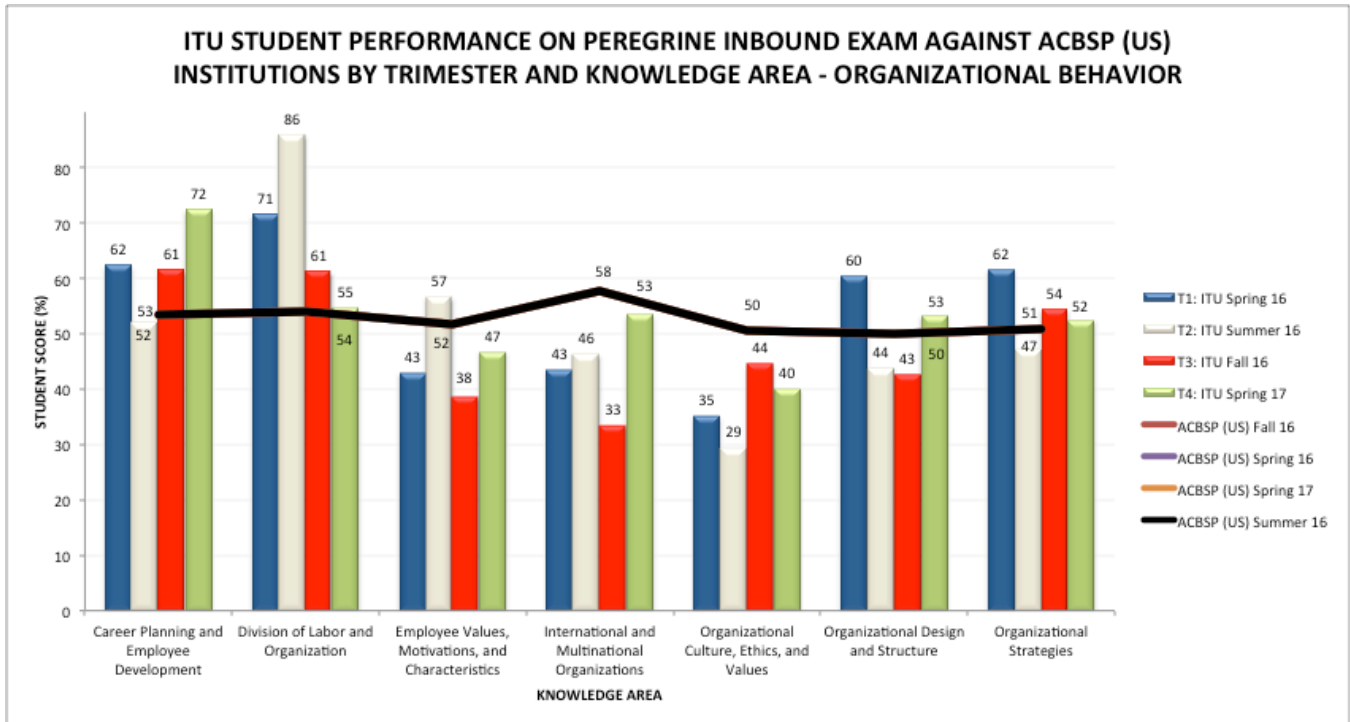


- Overall, ITU students ranked above the ACBSP (US) average for POM outbound exams. Areas of consistently outstanding performance include Quality Control and Improvement and Operations and Production Management Strategies. These areas were highlighted as areas of improvement on the inbound exams previously. This turnaround can be attributed to the quality of teaching students receive in their MBA degrees. Particularly, this is a credit to the business department faculty who are not only highly qualified (academically and professionally) but also bring their significant industry experience in the field of POM to the classroom. Of slight concern however, is ITU student performance on Sampling and Data Analysis. In previous trimesters, this was noted as an area of outstanding performance. However, since Fall 2016, student performance in this area has been in decline indicating the need for support in this area.

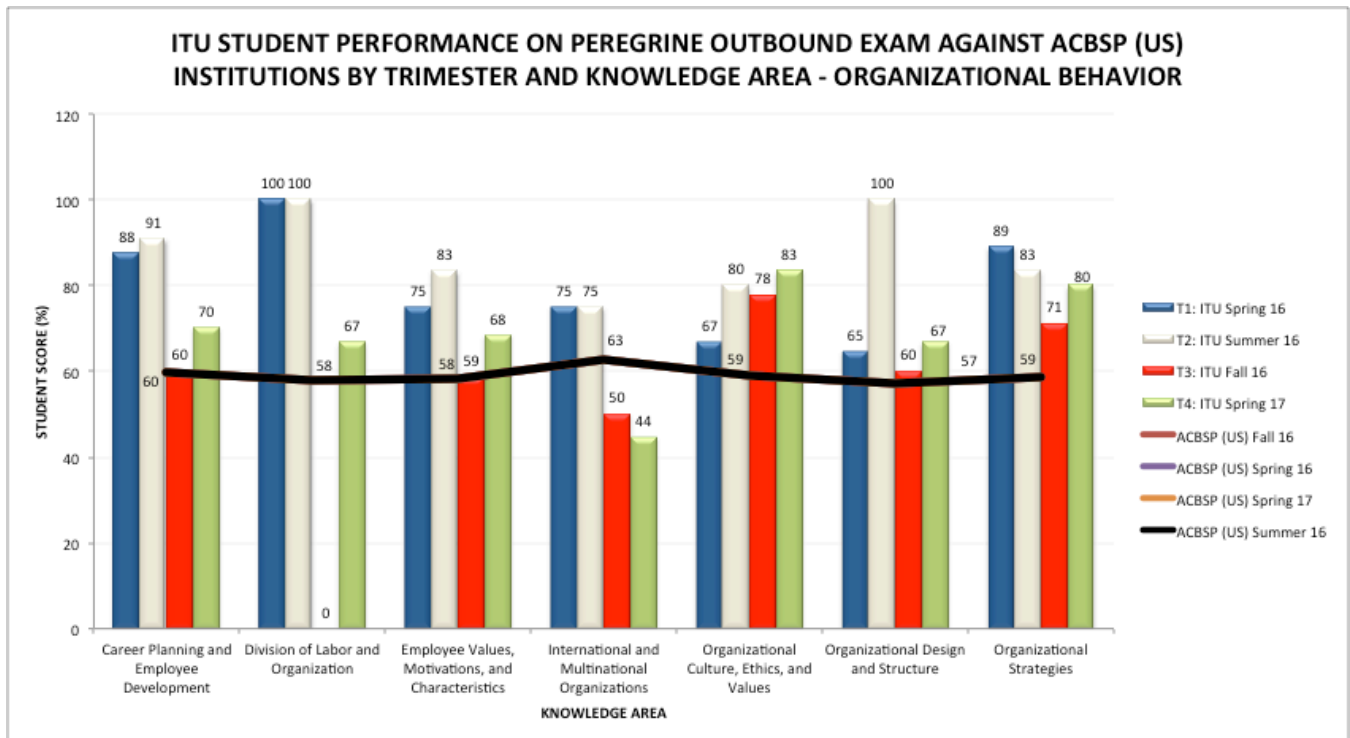
c. Organizational Behavior



- Organizational Behavior (OB) is a subset of the Management knowledge area. Incoming ITU students performed on par with the ACBSP (US) average for inbound exams. It is pleasing to note that after a couple of terms of performance slightly below par, ITU inbound students are turning this around. On the outbound exams however, ITU students outperform the ACBSP (US) average. Although ITU students do perform better on the outbound exams than they do on the inbound exams, it is recommended that students put time and effort into answering the questions. Certain volatility (yo-yo scores) has been noted in ITU outbound students' performance in OB from term to term. This could be indicative of students not paying sufficient attention to the exam. However, despite this volatility, ITU students still perform better than the ACBSP (US) average.

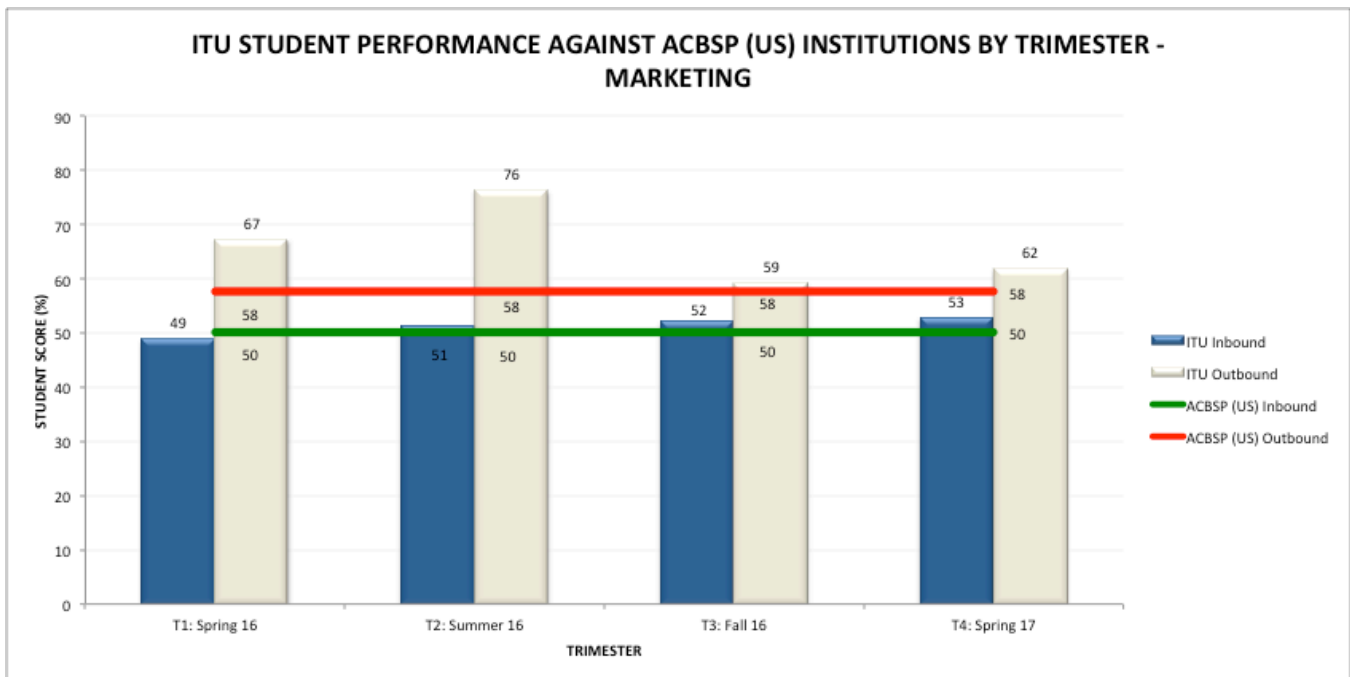


- ITU students doing the inbound exams overall seem to have a good understanding of the sub topics that comprise OB. Areas of particularly noteworthy performance include Career Planning and Employee Development and Division of Labor and Organization to some extent. The latter sub topic, however, needs some attention due to the trend of declining performance noted from trimester to trimester. ITU students, however, performed below the ACBSP average for Employee Values, Motivations, and Characteristics, International and Multinational Organizations and Organizational Culture, Ethics and Values. This indicates that, although ITU students commence their MBA programs with a certain level of prior experience in organizations, and that they are exposed to facets of OB in organizations, they may not be entirely familiar with the global context of organizations, culture and behavior.

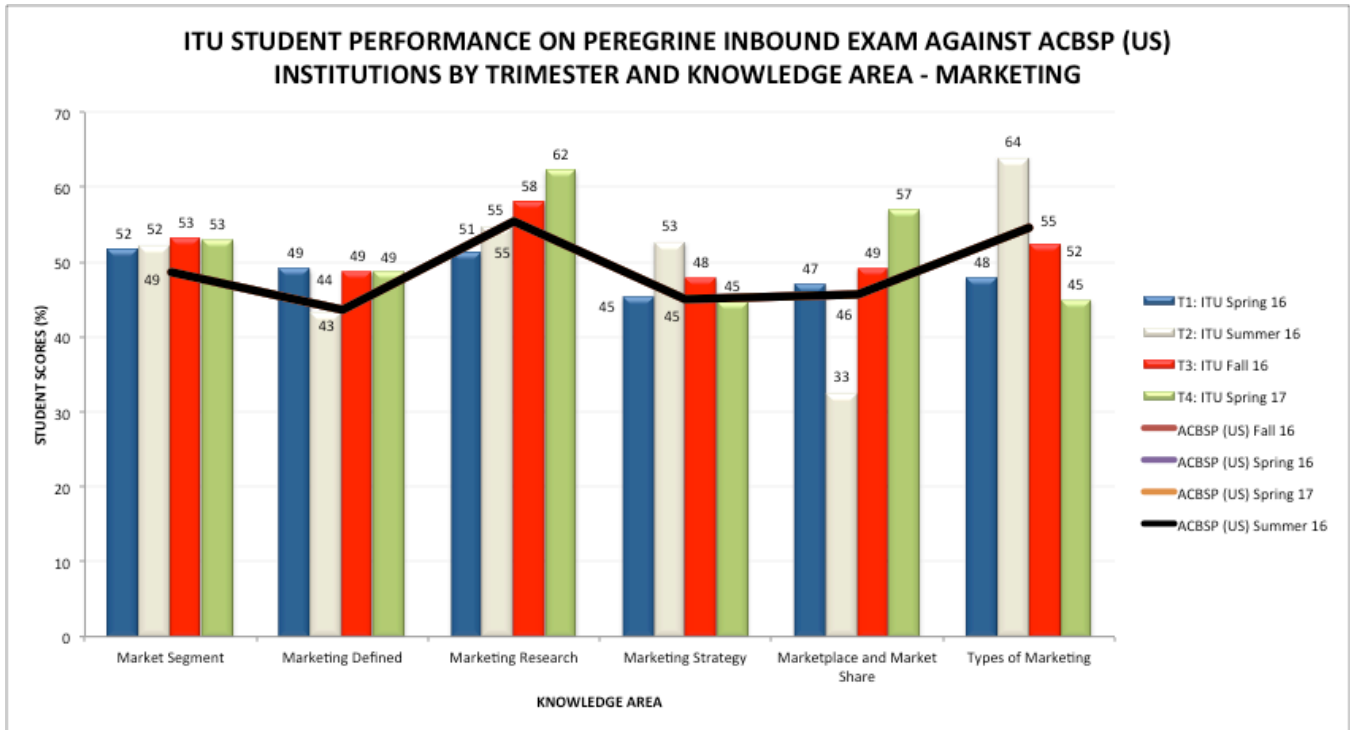


- Overall, ITU students outperformed the ACBSP (US) average on almost every facet of OB. Areas of particularly noteworthy performance include Organizational Culture, Ethics and Values, and Organizational Strategies. The stellar performance, again, is a testament to the quality of business education students receive as part of their MBA at ITU. As with the inbound exams, International and Multinational Organizations seem to be areas that ITU students face difficulties with in comparison to the ACBSP (US) average. Coupled with this, is the observation of declining performance from term to term. It is recommended that course content include a more robust understanding of international and multinational organizations. We noted an anomaly in the scores for Division of Labor and Organization in Fall 2016. Out of the 117 exams completed by ITU, it seems like not a single student completed the exam resulting in a null score. This is being investigated further.

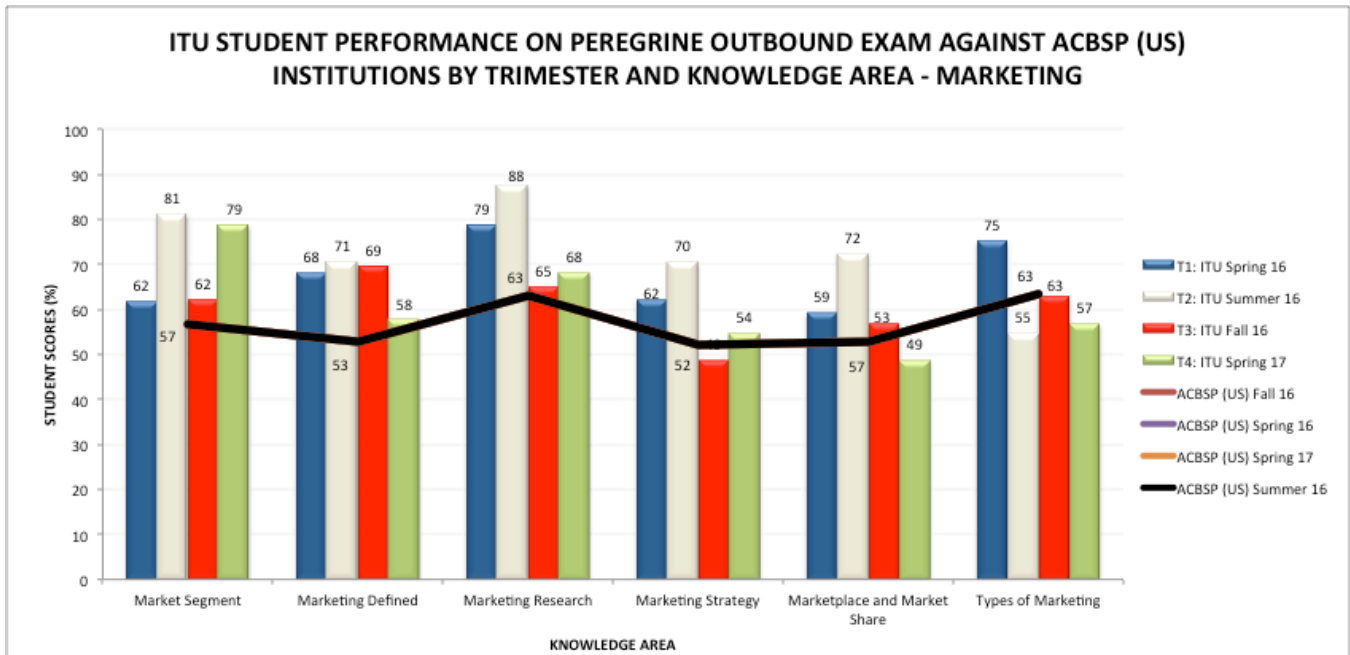
9. Marketing



- On the Marketing inbound exam, ITU students performed better than the ACBSP (US) average. This indicates that students coming to ITU for their MBA degrees generally have a good understanding of marketing concepts. On the other hand, ITU students outperform the ACBSP (US) average for outbound exams. While outbound ITU students do perform better than inbound ITU students on Marketing, a slight yo-yoing effect has been noted in the scores earned by students. It is recommended this trend be watched over time. It is not of significant concern, just yet as ITU students are still above the ACBSP (US) average.

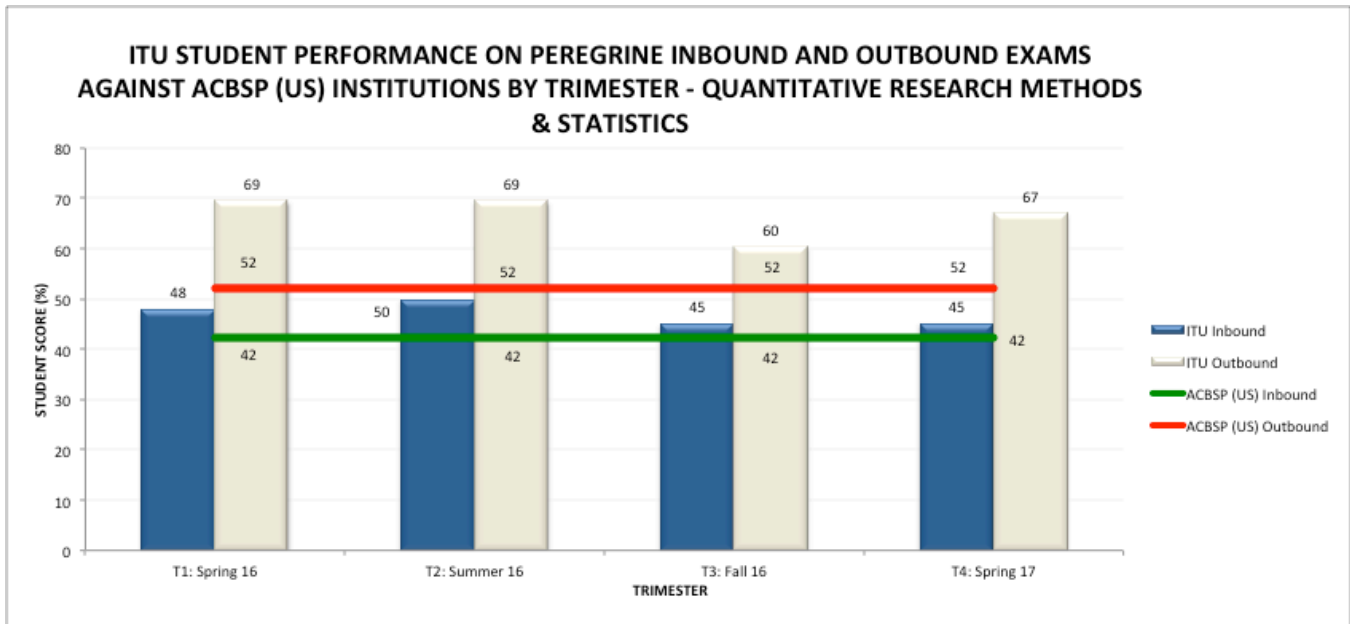


- When we analyze the Marketing inbound exam by breaking it down into its component sub topics, we note that ITU students perform above the ACBSP (US) average on the whole. Certain areas like Types of Marketing and Marketing Strategy were just slightly below the ACBSP (US) average. However, it may be argued that students coming into their MBA degree at ITU may not have been previously exposed to strategic components of marketing and may not also necessarily understand in depth the various types of marketing. ITU inbound students, however have a good understanding of Market Segmentation as noted in their consistently above average performance from term to term.

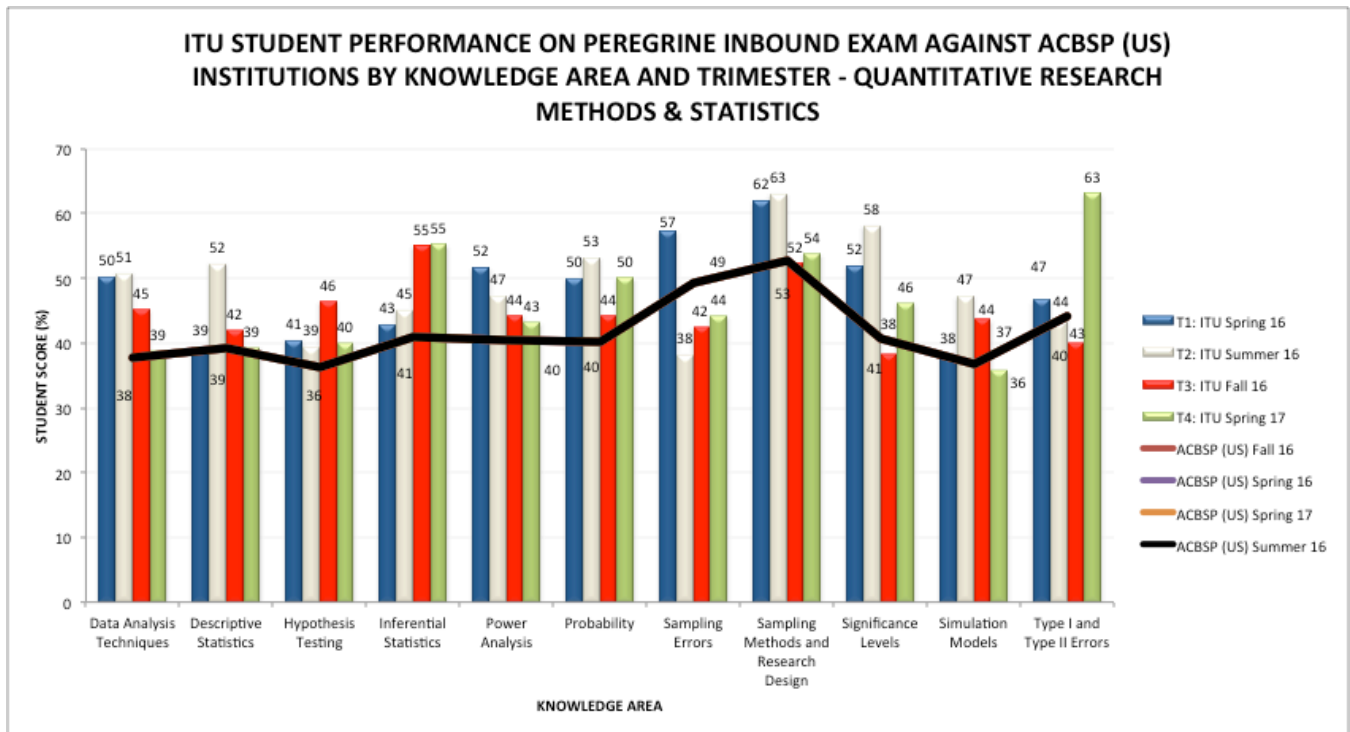


- ITU students outperform the ACBSP (US) average on the Marketing outbound exam in general. Particular areas of stellar performance include Market Segments and Marketing Strategy. These areas were identified as areas of weak performance on the inbound exams. This is good news for the Business Department at ITU as it indicates that ITU students get a high quality of education in Marketing. Some caution needs to be exercised in areas such as Marketing Defined, Market Share and Types of Marketing. These areas are currently displaying a trend of declining student performance from one term to the next.

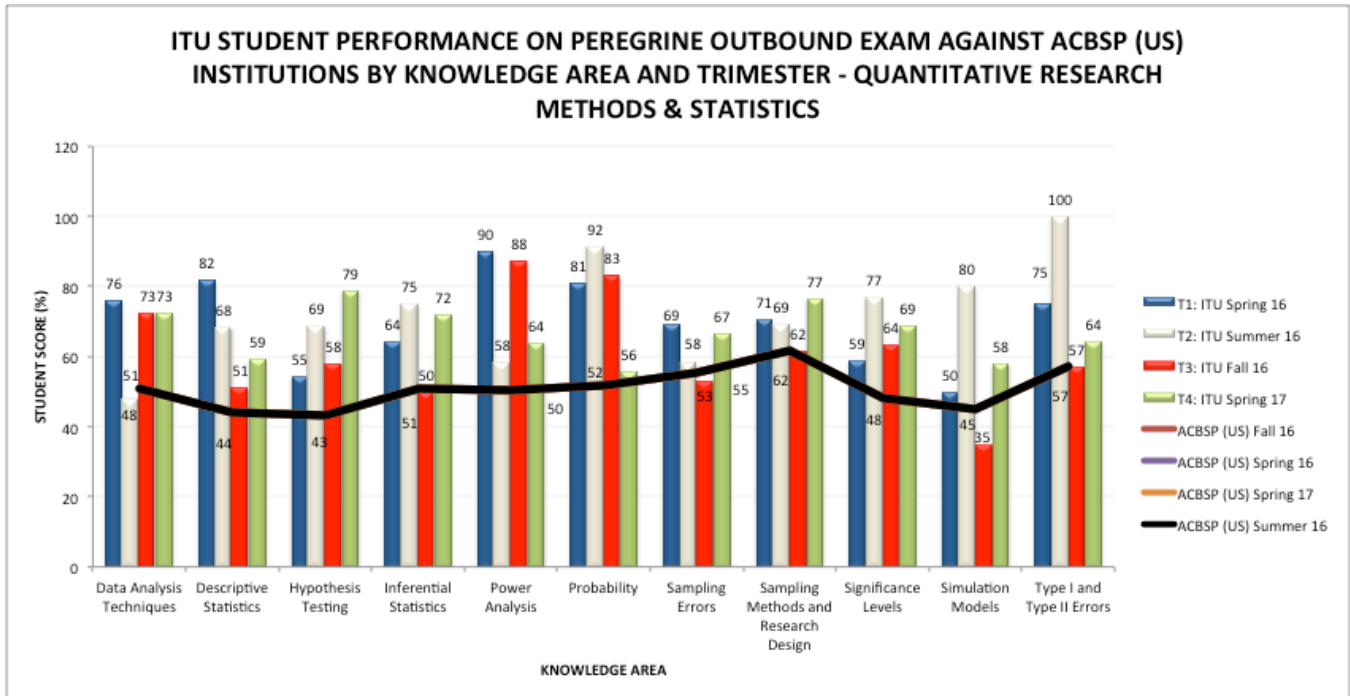
10. Quantitative Research Methods and Statistics



- Quantitative Research Methods and Statistics is the last knowledge area tested on the Peregrine inbound and outbound exams. Overall, ITU students outperform the ACBSP (US) averages for both the inbound and outbound Peregrine exams. ITU student performance on the outbound exams are much better than their performance on the inbound exams leading to the conclusion that ITU Business Department provides students a robust learning experience in this knowledge area. However, on deeper analysis, Fall 16 and Spring 17 are showing declining performance on the inbound exam in comparison to Spring 16 and Summer 16. A similar trend has been noticed in the outbound exam performance too. However, despite this trend, ITU still remains well above the ACBSP (US) average.



- In general, this particular knowledge area is one where strongest student performances have historically been noted. This still holds true. Strong ITU student performances were recorded in the areas of Inferential Statistics, Probability, Sampling Methods and Research Design, and Type I and Type II Errors. This might seem strange in comparison with inbound performance on other knowledge areas. However, it must be remembered that students come into the ITU MBA degree with prior degrees in STEM fields and/or with a thorough knowledge of Advanced Mathematics and Advanced Statistics. However, some decline in performance was noted in Data Analysis Techniques, Descriptive Statistics, Sampling Errors, and Simulation Models.



- We mentioned previously that, ITU students outperformed the ACBSP (US) average in this particular knowledge area. When we analyzed further, Data Analysis Techniques, Descriptive Statistics, Hypothesis Testing, Sampling Errors, Sampling Methods and Research Design and almost every other sub topic recorded outstanding student performances. While the outbound scores of ITU students on the various subtopics are still well above the ACBSP (US) average, declining performance from term to term has been noted in the area of Probability and Power Analysis. These areas may need to be watched and/or incorporated specifically into curricular assessment for better student outcomes. Further, if students were to take the exams seriously, and not rush through these, we may see improved performances. Nonetheless, ITU students stand strong in their performance on this module, which is aligned with the various initiatives (Research Methods Workshops, Quantitative and Qualitative Research Methods components offered in the capstone courses and several other electives in Advanced Statistics) offered by the Business Department to improve student competencies in this area.

9.0 Conclusion

- Overall, ITU students consistently perform well on the inbound exams. They also consistently perform much better on the outbound exams than the inbound exams.
- ITU students also perform on par with or slightly above the ACBSP (US) average on the inbound exams. They consistently outperform the ACBSP (US) average on the outbound exams implying that the value students receive from their MBA at ITU is much better than most schools in the United States. The same is true when ITU students are compared with ACBSP accredited schools in Region 7, which includes the State of California, and other Private Not-for-Profit Institutions.

- In comparison with other institutions offering MBA and/or Masters Business programs, within the United States and globally, ITU continues to perform on par or better with comparative schools
- Stellar performances in ITU student scores were noted in Quantitative Research Techniques and Statistics, Accounting, Finance and Organizational Behavior.
