

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

ACADEMIC SENATE

ACADEMIC PROGRAMS COMMITTEE

REPORT TO

THE ACADEMIC SENATE

AP-014-178

Program Review - Apparel Merchandising and Management

Academic Programs Committee

Date: 05/16/2018

Executive Committee  
Received and Forwarded

Date: 05/23/2018

Academic Senate

Date: 07/11/2018  
First Reading  
09/12/2018  
Second Reading

**BACKGROUND:**

As part of the university's five-year planning cycle for all programs, a self-study was prepared by the department of Apparel Merchandising and Management (AMM), covering the academic years 2008/09 through 2013/14. An external review team, consisting of Dr. Ting Chi from Washington State University and Dr. Lynn Boorady from the State University of New York College at Buffalo, visited the AMM Department on May 31, 2017. After their visit, a report was prepared and submitted by the external reviewers, after which both the department and Dean prepared responses. The AP Committee has reviewed these responses.

**RESOURCES CONSULTED:**

Dr. Muditha Senanayake, Interim Chair of the AMM Department  
Dr. Lisa Kessler, Interim Dean of the College of Agriculture  
Dr. Peter Kilduff, Interim Associate Dean of the College of Agriculture

**DISCUSSION and RECOMMENDATION:**

The external reviewers were overall positive in their appraisal of the department's teaching and scholarship. They were approving of the department's planned semester curriculum, and made particular mention of the department's substantial efforts in student advising, work that is not light but is shared among the faculty to help students succeed. The reviewers did note concerns about the sustainability of some of the department's plans for growth; the chief concern was the need for more tenure-track hires to support growth. This is a common issue for departments across campus, and it is significant that reviewers from peer programs concur with the need for more tenure-track hiring.

The reviewers also noted faculty complaints about the burden of university-level initiatives, and the energy they draw away from department-level efforts. The Dean's office concurred with this point. The reviewers recommend the hiring of at least one more tenure-track faculty member and one more technician, to support technology-dependent laboratory courses.

The department and Dean's office were generally in broad agreement with the reviewers' comments and suggestions. Overall, the review is positive, pointing to a department with sound fundamentals and real commitment to working with students. Most areas of concern are resource concerns shared by all programs on campus. The Academic Programs Committee commends the Department of Apparel Merchandising and Management on their work, both in the operation of their programs and in the preparation of a thorough and thoughtful review that highlights important issues.



**California State Polytechnic University, Pomona**  
**Huntley College of Agriculture**

**B.S. PROGRAM**

**IN**

**APPAREL MERCHANDISING & MANAGEMENT**

**FIVE YEAR REVIEW: 2008/09 – 2013/14**

**Program Self Study**

**May 2017**

**B.S. PROGRAM IN APPAREL MERCHANDISING & MANAGEMENT  
FIVE-YEAR REVIEW 2008/09 – 2013/14 SELF-STUDY DOCUMENT**

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## **1. INTRODUCTION**

### **1 a. Program Description**

The program offers a Bachelor of Science (BS) degree in Apparel Merchandising and Management (AMM) with two options; Fashion Retailing and Apparel Production. The Apparel Production option has 2 tracks; Fashion Design Management and International Apparel Management. The program is offered by the AMM Department. AMM is housed in the College of Agriculture, as one of its five departments.

### **1.b. Mission and Goals and Alignment with College and University**

The mission of the Apparel Merchandising and Management department is to provide high quality instructional, research and outreach programs that respond to the needs of individuals and organizations, especially those who are domiciled in southern California. This mission embraces

- state of the art educational programs that link theory with practice to prepare students to be effective leaders within the apparel production and distribution sector, and in alternate career destinations.
- scholarship that advances knowledge about the people and technologies involved in the creation, production, distribution, consumption and teaching of apparel for the benefit of the industry, the profession, society in general and for the enhancement of our instructional programs.
- outreach activities that support the apparel business and educational communities in southern California and beyond, including teacher education, technical training and management education programs.

The Bachelor of Science Degree in Apparel Merchandising and Management strive to achieve the following program goals.

- To provide students with the knowledge and skills necessary to develop, produce, evaluate and sell apparel products.
- To provide students with an understanding of materials, product design and end uses of apparel products.
- To develop professional skills necessary for future managers in the textile, apparel and fashion retailing industries.
- To provide students with the ability to synthesize apparel industry knowledge, conduct research studies, and implement solutions.

The following student learning outcomes are expected and assessed.

- Graduates of the program will be able to demonstrate the process of developing, producing, evaluating, and selling apparel products.
- Graduates of the program will be able to understand materials, product design, and end use of apparel products
- Graduates of the program will be able to identify, incorporate and apply consumer characteristics to product development and marketing.
- Graduates of the program will understand the operational components of the apparel industry and how industry meets market needs.

- Graduates of the program will be able to synthesize apparel industry knowledge, conduct research studies, and implement solutions.
- Graduates of the program will be able to demonstrate professional attitudes and skills so they will be able to function and behave in a professional manner in the competitive apparel industry.

These program goals are aligned with the college mission of pursuing an integrated approach to the discovery, dissemination and application of scientific, technological and business knowledge that embraces food and fiber production, distribution and consumption. The AMM BS degree program focuses on business and technology aspects related to the human resource needs of the global textile and apparel sectors. The AMM program expects that its faculty will expand relationships with off campus communities that will enhance academic programs and support industry development. The College emphasizes the importance of this aspect of its mission and how it strives to create future leaders in the agricultural and related industries by providing innovative approaches to learning and supporting students.

The goals of the AMM program are aligned with the university's mission of advancing learning and knowledge by linking theory and practice in all disciplines, and preparing students for lifelong learning, leadership and careers in a changing multicultural world. One of the main features of classes offered in the AMM program is the opportunity for students to practice what they learn in a lab, activity or industry setting. This links theory and practice to allow students to master the subject matter by a learn by doing approach.

### **1.c. Previous Self-Study**

At the last five-year review, the program was in its second 5-year review period. The program experienced a number of changes. As a new growth program, a key feature in this period was related to enrollment growth. The program experienced an enrollment increase from 116 majors in 2002/03 **to 246 majors in 2007/08.**

A review of the previous self-study reveals that the AMM program has advanced significantly. It has expanded enrollment rapidly; it has successfully established a new faculty team on the retirement of the program's founders; it has advanced its curriculum and successfully renewed its endorsement by the American Apparel & Footwear Association; and it has expanded and upgraded its specialized teaching facilities in building 45. It was noted that the AMM faculty were acutely aware of areas for improvement in the program, especially with regard to student learning outcomes. One core objective highlighted was to enhance the program quality, which the faculty was committed to.

This previous review also addressed some of the limitations of potential growth due to a number of reasons. These include: limited availability of resources; the CSU decision to reduce curricula from 194 to 180 units, introduced in 2005; rapid enrollment growth in the AMM program outstripping development of the faculty; and turnover of faculty during the period, with both of the program's founders (who were its only senior faculty) retiring in quick succession during the period, in addition to significant turnover among part time and full time faculty members. Another objective that could not be met was that of expanding textiles into an option. In fact, emphasis on basic textile science was reduced slightly in the unit reduction exercise. However, the faculty recognized the need to rectify this problem and the first in a series of steps

to expand and deepen textile education within the curriculum was put in place for the 2009/10 curriculum year.

### Enrollment Growth

As a new growth program a key goal in the previous five-year review was related to enrollment growth. Program growth goals have been met with the increase of AMM majors from **253** to 361 over the review period.

The previous program review identified issues with existing resources and what opportunities it will have with new resources. This is discussed under the following topics with its recommendations and resulting changes during this program review period.

### Program Development:

Previous program review identified growing demand for business and technology savvy apparel graduates and to keep up with the changing technologies and demand for new thinking practices. Looking forward it was also suggested to see the opportunity to expand enrollment and broaden the scope of the B.S. program, with emphases in areas such as textiles, technical aspects of product design, customization technology, and apparel market analysis. In addition, it encouraged the department to explore the opportunity to create separate degree programs in the areas of apparel production and fashion retailing. It is also suggested to develop certification courses to reinvigorate the department's outreach activity to the local industry. A secondary aspect of these courses would be to provide additional training opportunities for existing undergraduates beyond the program. The previous study also suggested exploring the opportunity to develop a Masters program due to the apparent demand from undergraduates, alumni and industry.

During this program review period, faculty made extensive curriculum changes to address and update the program and improve student learning outcomes. As discussed in detail in the program description below, the curriculum was significantly changed, strengthening the production, retail and textile technology areas. The department broadened the scope with emphasis on textiles, digital design, technical design, information technology, undergraduate research and retail studies. New certificate programs were developed. However, the implementation of these certificate courses through the College of the Extended University could not be fully realized due to operational difficulties. It was also expected to be self financed with the benefit for existing undergraduate students to reach out to technical areas outside their major program of study. A Masters program in International Apparel Management was developed which is in the process of acceptance by the CSU system. This was developed as a self funded Masters program at the direction of the academic leadership on campus.

To overcome the imbalance in the number of students in the Fashion Retailing and Apparel Production options, two tracks within the Apparel Production Option: Fashion Design Management and International Apparel Management (effective 2008-2009 degree requirement) was implemented. This change was adopted to cater for students with two discrete interest areas: one in apparel product development and the other in apparel business management. The former group had struggled with the industrial engineering aspects of the advanced apparel production class, while the latter had struggled with patternmaking and sewing classes.



The faculty decided to keep the program as a single BS degree with apparel production and fashion retail options. This in part because any program in fashion retailing or apparel production required a common core of classes, and also because maintaining a single unified degree program avoided issues of enrollment size, as the university implemented a strategy to close or merge smaller programs.

### Curriculum and Student Learning Outcomes

The AMM program is marketed as an applied business and technology degree. Nevertheless, as explained in the previous review, many students attracted to the program tend to have stronger creative and aesthetic capabilities and lesser affinity to quantitative and technological elements, including certain management topics. As per the previous review, faculty identified areas of relative weakness in student learning outcomes as quantitative skills, critical thinking, management information systems and textile knowledge. These were critical aspects that students require to differentiate themselves in the workplace and to emerge as leaders in their respective organizations. As suggested, the faculty addressed these areas during this review period by making multiple curriculum changes and new student assessment plans that included pre-tests to evaluate subject retention from previous classes. These efforts were also achieved through recruitment of new faculty expertise in areas such as retail and textiles. These changes are discussed in detail in the program description and assessment sections. In addition the previous review suggests that the department should seek to broaden the appeal of the program to those in the business and technology community. However, due to organic program growth this effort is yet to be implemented to a considerable extent.

To allow more exposure to problem solving at an advanced undergraduate level and to meet university goals of expanding opportunities for undergraduate research, two Senior Research Project classes were added during the review period. In general, an increase of the core units from 30% to 32% (53 out of 180 total degree units) had taken place with the addition of a course on global perspectives related to apparel industry dynamics. As the department continued to meet apparel production curriculum guidelines and other requirements defined by the AAFA's Human Resource Leadership Council (HRLC), the Apparel Production program maintained its AAFA endorsement. However, in 2013, AAFA decided to end the endorsement program at the end of that cycle (2017) due to lack of funding. Instead they now participate in the student scholarship competition conducted by the YMA (Young Men's Association).

The students continued to learn common computer programs used by the industry during this review period. Important additions to the program curriculum were implemented such as technical packages, body scanning, 3D computer aided design, and enterprise resource planning. The Production and Retail students got the opportunity to obtain a good learning outcome from designing, developing and producing a product line with industry partners and sourcing and selling products using the retail micro-business which is not usually available in other similar programs. This is due to the complexity of teaching these unstructured classes and operational difficulties to carryout such a class within a short period of time available in a quarter system. With the addition of a new retail faculty member, the retail buying curriculum was strengthened by constantly improving the buying class and expanding Excel-based learning within the curriculum.

### Advising

The previous review identified advising problems due to the intricacies of the curriculum, the complexity of meeting university requirements, capacity limitations within the system that make

it difficult to find classes, and off-campus student commitments such as part-time employment. To improve graduation rates it is imperative to improve advising outcomes for our students, who come from a variety of educational backgrounds. In addition, transfer students pose a particular challenge in getting all transferable credits articulated, and in getting them synchronized with the course sequence in the program. This problem is also aggravated with the limited numbers of tenure track faculty in the department, resulting in advising loads of 60-80 advisees. The full time lecturer was released from advising during this review period based on a new university policy, which also intensified this situation. As a strategy to lessen this problem and as suggested in the previous review, the department developed more effective self-help advising resources for AMM students via Blackboard and mandatory advising holds for class registrations. Additionally, the department explored several avenues to improve advising including 'Advising Cafes'. The plan to develop a freshman-mentoring program using seniors was implemented but proved problematic and was dropped after the first year. Rectification required management time that faculty did not have. Also the department worked with the college on assessment of advising. The department also suggested a half time advisor to alleviate the work load on faculty so that faculty can concentrate more on instruction, scholarship and program advancement and advising students on their professional development. This is because time commitment on advising students on course selection and providing permission numbers etc. continued to be a concern for faculty time.

#### Faculty

The previous review identified that the expansion of tenure track lines lagged enrollment growth. Consequently, the department expanded the number of part time faculty to meet the instructional needs. However, adjunct faculty do not contribute to service, including the longer-term development of the program. It was also identified that there is a need to strengthen the faculty scholarship activities and raising external grant while maintaining a strong industry orientation. In addition, to launch a Masters program and to achieve a critical mass that could share the university service requirement, an increase in the number of AMM faculty lines was necessary. Over the review period, the number of tenure track faculty was increased by one, with the addition of two new faculty members and the departure of another. This increase was not commensurate with the enrollment growth of AMM majors from 253 to 361. High teaching and service loads and limited travel funds have constrained the ability of faculty to work closely with the industry. However, faculty improved its scholarship and grant output as discussed in the review below. Further, in the previous review, a key objective of the department's development plan was to secure sponsorship of a distinguished chair position within the Apparel Merchandising and Management field. This was not accomplished during the review period.

#### Support staff

The previous review identified the needs of having support in terms of technician training, enhanced IT support, student administrative support to the department ASC (secretary), and instructional student assistance (ISA) for faculty. The technical assistance, maintenance and repair needs to manage the extensive range of sewing equipment, specialized testing equipment, broadening range of computer hardware and software applications have increased with the increase of student enrollment and usage over increased number of courses with hands on labs and activities. As per the previous review period the department had experienced significant delays in new system installation with limited support staff. The department suggested more resources and increased budget to overcome difficulties. These issues remained mostly unsolved during the current review period due to the system-wide budget cuts within the CSU. During this

review period, the department continued with one technician and one ASC. In addition faculty furloughs (10% reduced work time) during the review period prolonged these issues.

### Budget Resources

The previous review period identified issues related to the limited budget resources for the program considering its numerical growth and technical diversity, and discussed the need for substantial budget resources. This is because the department operates a technology intensive program with an extensive array of equipment in multiple laboratories, all requiring maintenance and upgrading. Further, as discussed in the support staff section, it is important to have a budget assigned for the support staff, including machine maintenance by an outside company and instructional student assistance for faculty. During this review period, the department continued to add equipment to its laboratories, as envisioned to expand program goals and its strategic direction. As recommended in the previous review, the department recognized the ways to generate savings without unduly impacting program quality. These include changing practices such as by using Blackboard to share documents with students rather than providing handouts in class, switching to software vendors who provide their systems for free, by performing certain basic maintenance activities in-house rather than using outside contractors; and by improved housekeeping to reduce the need for maintenance and eliminate waste. Despite the department indicating the need for greater budgetary resources to support investment in people, facilities, equipment, and systems, it could not be met during the current review period due to the system wide budget cuts in the CSU. The department recognizes the importance of external fund raising to meet its objectives and was active throughout the review period, as discussed in section 5. Also, this process was greatly assisted with a demonstrable commitment by the college and university to support the program. The college assisted with some funds to remodel the facilities and campus SPICE grants won by faculty assisted in adding new equipment, upgrading classrooms, and providing faculty release time to improve instructional methods. However, the funding through programs such as SPICE is limited to around \$25,000 and therefore does not permit big ticket items. However, it has been used as leverage to obtain equipment at a large discount.

### Facilities

The previous review explains that the department is housed in an aging building not built for instructional purposes and which in certain areas lacks essential amenities to support instruction, such as proper lighting and environmental control, and smart classroom facilities. The building is in need of extensive refurbishment and could certainly benefit from a thorough clean and redecoration. Students have only limited facilities available in the building, which is a problem given the remoteness from the central campus area.

Within the constraints of what departments can do to improve their facilities, a great deal of work has been done to beautify building 45. The Equipment Technician continued to take ownership of this issue as part of his job and has facilitated many improvements to the layout and usability of facilities in the building. In addition, students and faculty continued to volunteer their time to clean rooms, update visual displays around the building ahead of recruitment events. These activities continued over the review period.

As indicated in the previous review period, plans were made to renovate room 102 including 102A to create a flexible teaching and conference space with a four-way classroom layout using mobile room partitions that can open-up to create an auditorium for conferences and shows. The cost estimation from the facilities was \$1.2 million. As this was not feasible, room 102 was renovated to have a larger smart classroom that can house 50 students, while room 102A was transformed into a computer lab with 28 stations. The plan to renovate room 201 into a study

room with library resource was made without investing money for major construction with additional windows. The suggested plan to create the mezzanine, which is currently used as a storage place, into a student lounge could not be achieved during this review period due to lack of funds. These two projects (201 and mezzanine) were estimated at \$120,000.

Another consideration in the previous review period were to create better teaching spaces in 45-125 and 45-153 (Production lab). During the review period fabric storage area was removed to an annex and some available large desks were moved into 45-153 to create a classroom within the production lab. This space was also provided with basic smart classroom facilities. These large desks also provide space for pattern making classes. The change has greatly benefited apparel production related classes, even though it was not the best environment due to its open floor plan. As suggested in the previous review period, it was a key objective of the department to find donors to support refurbishment of the facilities in building 45, or alternatively to support creation of a new building. This plan has been continuously shared with advisory board members who are assisting the department in identifying potential sponsors or donors during this review period.

### Equipment

The department has an extensive array of equipment that needs periodically upgrading, in some cases every year. As new technology continues to drive the apparel production and fashion retail sectors, the department is faced with having to broaden the range of product and process technologies (manufacturing and business) it supports for instructional purposes.

An issue highlighted during the previous review period was the costly annual software upgrades (such as Adobe Suite) and updating and expanding the range of production and textile testing equipment some of which were needed to meet AAFA program endorsement criteria. Over the review period the department continued to receive donations of software licenses and training from some vendors, such as AIMS360.

Other equipment requirements the department identified in the previous review period include: replacement of worn-out sewing equipment, acquisition of modern fabric storage equipment that meets safety criteria and looks more professional, installation of an RFID system within the retail micro business (Apparelscapes), expansion of the mass customization lab with new single camera body scanning technology, and 3D virtual reality software, and the creation of a video production facility for supporting video merchandising (increasingly popular in retail stores). While the department made every effort to prioritize and acquire affordable software systems, machines and testing equipment over the review period. Out of the above list, the department acquired 2D pattern making and 3D virtual fitting and visualization systems from optitex and Tukatech. A donation of 24 used but relatively youthful sewing machines enabled us to retire veteran equipment in the production lab. New textile testing equipment was also purchased notably a flammability tester and spectrophotometer. Software upgrades for existing systems, including the Eton unit production system and the TC<sup>2</sup> body scanner were donated. However, as experienced in the previous review period, the department could not secure any notable donations of new equipment.

During the review period the department has been seeking to update and expand its range of industry software systems. Faculty have been constantly evaluating alternative solutions and building relationships with software suppliers to seek donations of software, associated hardware and of the training and support essential to assimilating these technologies successfully into the program.

### Library Resources

The previous review period addressed the weak growth of library resources since 1995 when it started as a new program and the lack of sufficient budget (\$1500 in 2006/7). The program liaison librarians have been extremely supportive in expanding the resources and have continued to assist in adding more resources during this review period. New subscriptions such as WGSN, Textile Outlook International and Euromonitor were added to the pool of resources. In addition the faculty have worked with the program liaison librarian to develop subject specific resource pages for the department and have organized class sessions to learn effective literature/information search methods etc. conducted either at the department or in the library classrooms. In addition to undergraduate resources the department is seeking enhanced resources for the planned Masters program. The expectations by faculty continued over the review period to add more subscriptions to academic, professional and trade journals, specialist industry resources (e.g. Sourcing Journal and Mintel market reports) and to statistical databases (Monthly Bulletin of Statistics; World Development Indicators). A greater emphasis also continued for online access to resources to better match the reality of modern student populations.

### **Summary**

The Bachelor of Science (BS) degree in Apparel Merchandising and Management consists of two options; Fashion Retailing and Apparel Production. The Production option has two tracks namely Fashion Design Management and International Apparel Management. Over the review period the program has achieved rapid enrolment growth against a backdrop of tight economic conditions. It has achieved most of the goals set forth in the previous review period and has advanced further in program development, curriculum development, assessment, and advising by effectively using faculty, staff and other resources. With its growth record, it is imperative to recruit more tenure track faculty, add supporting staff, and attract more financial resources to secure its position as a leading program in its field in the United States.

**2. PROGRAM DESCRIPTION**

Introduction

The Apparel Merchandising and Management (AMM) Department offers a Bachelor of Science degree in AMM with two Options: Apparel Production and Fashion Retailing. It is the only such program in the western United States where courses are offered in the two areas. Students in both Options take a common core curriculum of 50 units (in 2013/14 which was changed from 57 units in 2009/10) to obtain a broad understanding of the whole fashion supply chain. This approach was developed in response to industry feedback and creates more marketable graduates. The required Subplan or Option courses then provide greater depth and breadth in their chosen area of studies. The above mentioned units change in the core was as a result of adding more courses such as undergraduate research to the Subplan or Option courses. Students also take 36-38 units (36-44 in Apparel Production) of courses in support of their major. Some of these, as described below are common to both options. The General Education Core follows CSU system guidelines and comprises 68 units of courses. This requires students to complete 180 units, which accounts with the above unit breakdown in respective area (Core, Option, Support and GE) of the respective curriculum (Apparel Production and Fashion Retailing Options).

In 1997, the AMM program received endorsement from the American Apparel and Footwear Association (AAFA) for the Apparel Production Option. The Department is one of thirteen schools nationwide to receive AAFA endorsement. The Department must meet curriculum guidelines and other requirements defined by industry members and must be reviewed every five years to maintain AAFA endorsement. Subsequent AAFA reviews took place in 2002, 2007 and 2012.

The AMM program has a strong learn by doing approach. The majority of AMM classes have laboratory or activity components attached where students apply concepts introduced in the classroom. Many courses stress analysis and problem solving since the AMM program prepares students for future management positions in the industry. The ultimate expression of this approach is in the capstone sequences for each option, where Apparel Production and Fashion Retailing seniors, respectively, run apparel production and fashion retail micro-businesses.

**2.a Units to Degree**

The units to degree requirement was continued as 180 effective fall 2005. The following tables indicate the units to degree change with curriculum changes during the academic years 2008/09 through 2013/14.

Apparel Production Option

Table 2.1: Change of Units to Degree in Apparel Production Option

	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14
Core	57	57	57	57	50	50
Sub Plan/Option	17-19	17-19	17-19	17-19	24-26	24-26
Support	36-38	36-40	36-40	36-40	36-40	36-40
Restricted Electives	0-20	0-22	0-22	0-22	0-22	0-22
GE	68	68	68	68	68	68
Total	180	180	180	180	180	180

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As shown in the Table 2.1, a considerable change to the units in the core took place in 2012/13 academic year. The core units changed from 57 to 50 (-7 units) while sub plan/option units increased from 17-19 to 24-26 (+7 units). This was a result of the following changes.

- i. Moving two courses (AMM 108: Culture People and Dress (4) and AMM 270/A: Visual Merchandising/Store Design (2/1) from the core to the restricted electives.
- ii. Moving AMM 314/A Apparel Technical design (2/2) to Sub Plan/Option courses
- iii. Adding the new AMM 260/L: Textile Fabrication (3/1) to the core
- iv. Deleting AMM 300: Fashion Industry Dynamics (2) and adding the 2 units to AMM 341 (1) while changing its name from Internship/Career preparation to Apparel Professional Development.
- v. Adding a new course AMM 214/A: Introduction to Pattern Making (1/2).

### Fashion Retailing Option

Table 2.2: Change of Units to Degree in Fashion Retailing Option

	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14
Core	57	57	57	57	50	50
Sub Plan/Option	17	17	17	17	24	24
Support	36-38	36-38	36-38	36-38	36-38	36-38
Restricted Electives	0-20	0-22	0-22	0-22	0-22	0-22
GE	68	68	68	68	68	68
Total	180	180	180	180	180	180

The Fashion Retailing curriculum core also changed from 57 to 50 in 2012/13 (Table 2.2). The following changes resulted in changing the core from 57 to 50 units and Required Sub Plan/Option courses from 17 to 24 units.

- i. Moving the course AMM 108: Culture People and Dress (4) from the core to the restricted electives
- ii. Moving AMM 270/A: Visual Merchandising/Store Design (2/1) from the core to the Sub plan/Option courses.
- iii. Moving AMM 314/A Apparel Technical design (2/2) to restricted electives
- iv. Adding the new AMM 260/L: Textile Fabrication (3/1) to the core
- v. Deleting AMM 300: Fashion Industry Dynamics (2) from core and adding the 2 units to AMM 341 (1) in the core while changing its name from Internship/Career preparation to Apparel Professional Development.
- vi. Adding a new course AMM 330: Apparel Retailing (3) and AMM 370A: Apparel Retail practicum (1) to the Sub Plan/Option courses

In addition to the above changes, AMM 381/L Apparel product Analysis (2/1) class number was changed to AMM 301/L in the core for both Apparel production and Fashion Retailing options.

## **2.b Curriculum**

### AMM Core

The AMM core provides students with a strong foundation in all aspects of apparel business and technology. In the final year of the review period, the core comprised 28% of program

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requirements (50 of the 180 units) that was reduced from 32% in 2012/13. This was increased back to 32% in 2015/16 with the addition of a course in Textiles and bringing a common Apparel Research Project class to the core from the Option courses. Core courses as per the final review year are listed in Table 2.3 and cover aspects such as digital fashion illustration, textile science and fabrication, product development, quality analysis, manufacturing, merchandising, buying, international trade, and the dynamics of the global apparel industry. In addition, there are six units dedicated to professional development. These include: AMM 341 which introduces students to alternative career paths within the sector and to develop skills for identifying internship and career opportunities and for marketing themselves to prospective employers including digital portfolios; and AMM 442 the internship experience.

Within the core students are introduced to a series of computer programs; MS Office, Adobe Illustrator and Adobe Photoshop. In addition to using MS Excel in depth for Apparel Merchandise Buying, the students use Excel templates for creating merchandise plans, and technical packages. All students are also exposed to specialized apparel industry software. In Apparel Production I students are exposed to Tukadesign for an introduction to pattern and Tukamark for an introduction to marker making and they use ETON, apparel Unit Production System. In Apparel Design Analysis students use TC<sup>2</sup> body scan imaging software.

Table 2.3: AMM Program - Required Core Courses (2013-14)

Course Name	Course Number	Units
Fashion Industry	AMM 101	4
Digital Illustration for Fashion lab	AMM 112L	1
Intro to Textile Science	AMM 160/160L	3/1
Apparel Design Analysis	AMM 210/210A	2/1
Fashion Promotion	AMM 230	3
Apparel Merchandise Buying	AMM 251/251A	3/1
Textile Fabrication	AMM 260/260L	3/1
Apparel Product Analysis	AMM 301/301L	2/1
Design and Merchandising Strategies	AMM 310/310A	2/1
Apparel Professional Development	AMM 341	3
Apparel Importing & Exporting	AMM 357	3
Textile Specification Buying	AMM 360/360A	2/2
Apparel Production I	AMM 381/381L	3/1
Internship	AMM 442	3
Dynamics of the Global Apparel Complex	AMM 457	4
<b>Total Units</b>		<b>50</b>

### Apparel Production Option

As a strategy to keep up with the human resource needs, a number of curriculum changes were made each year during the review period. The following discussion is based on the curriculum of the last year of the review period; 2013-14. The Production option has 2 tracks; Track A - Fashion Design Management and Track B - International Apparel Management. The Apparel Production students take six common Option courses comprising 19 units (see Table 2.4) before they select the Track A or Track B courses totaling the Option course units to 24 or 26 respectively. Here, students develop advanced skills in apparel technical design, research, product development and production. The Fashion Design Management track courses are expected to increase their knowledge deep in to product development while the International



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Apparel Management track courses are expected to provide them with deep knowledge in apparel sourcing, supply chain and production management.

In the Apparel Production Option sequence, students are introduced to additional industry software systems and master the software introduced in the core. Since the ability to produce ‘Technical Packages’ has become an increasingly important requirement for graduates entering the industry, students use Excel templates along with Adobe Illustrator assignments in multiple courses to fully synthesize this capability. Further students are tested on Excel knowledge along with production planning, material requirement planning, and work study (method study and time study) assignments. Apparel production students also learn to use CAD patternmaking program (TukaCAD) and marker making program (Tukamark) in apparel production option courses. In addition the department started exposing students to 3D CAD software programs for virtual fitting and visualization aspect of product development. In Advanced Apparel Production, students extensively use an enterprise resource planning and management software system, AIMS, for wholesale apparel production and inventory management. Students also use TC<sup>2</sup> body scanning software along with analysis of latest technology developments such as 3D printing.

Table 2.4: Apparel Production Required Sub plan/Option Courses

<b>Course Name</b>	<b>Course Number</b>	<b>Units</b>
Introduction to Pattern Making	AMM 214/214A	1/2
Apparel technical Design	AMM 314/314A	2/2
Senior project 1	AMM 461	2
Senior project 2	AMM 462	2
Apparel Pre-Production II	AMM 414/414A	2/2
Apparel Product Dev. Simulation	AMM 492/A	2/2
<b>Fashion Design Management - Track A</b>		
Apparel Production lab	AMM 180L	1
Apparel Product Development	AMM 410/A	2/2
<b>International Apparel Management – Track B</b>		
Apparel Sourcing and Supply Chain Management	AMM 453	3
Advanced Apparel Production	AMM 481/L	3/1
<b>Total units</b>		<b>24-26</b>

As part of the activity component within the option, students develop and manufacture their own casual wear product line. This includes carrying out market research, involving a consumer survey, focus groups, and trend and color forecasting. The product line is presented to the book store buyer who picks the styles to sell in the book store. The heart of the activity comprises the steps from initial design through the manufacture of the garment. The activity was operated with the collaboration of American Apparel, a major US garment manufacturer and retailer located in Los Angeles. However, later due to the change of management and company’s financial status the students are now challenged to source materials and production through local and some times foreign suppliers and production contractors. Students also outsource other production needs such as screen-printing and embroidery. Middle and senior level managers at American Apparel provided input at all stages of product line development and production. The final garments were manufactured in the American Apparel facility or contractors in LA with Apparel Production students supervising the production line as part of their experience. The product line is sold via the Farm Store, the University’s Bronco Bookstore and Building 45 boutique.

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### Fashion Retailing Option

The Option courses for Fashion Retailing (listed in Table 2.5) provide more in-depth coverage of apparel retailing aspects such as visual merchandising, market research, planning, allocating and forecasting, sourcing and supply chain management, wholesaling and retail operations management. Students utilize Excel templates to create merchandising plans, and practice financial and inventory management. In the activity component of the Fashion Retailing options courses, students run the retail micro-business; Apparelsapes. Applying professional practices and concepts learned in the classroom, they conduct market research, create demand forecasts and implement business development programs, including seasonal merchandising plans, sourcing strategies, inventory management, visual merchandising, promotion and store management programs. Apparel Retail Practicum and Apparel Retail Simulation Activities were set to teach students managing the retail micro business. During the review period an extra effort to teach retail software systems was made. As a result Retail Pro system was installed in the warehouse and in the Apparelsapes store in the building.

Table 2.5: Required Sub plan/Option Courses

Course Name	Course Number	Units
Visual Merchandising/Store Design	AMM 270/270A	2/1
Apparel Retailing	AMM 330	3
Retail Planning, Allocating and Forecasting	AMM 350	4
Apparel Retail practicum	AMM 370A	1
Apparel market Analysis and Reporting	AMM 443A	2
Apparel Sourcing and Supply Chain Management	AMM 453	3
Apparel Retail Simulation I Activity	AMM 454A	1
Apparel Wholesale Operations	AMM 471	2
Apparel Retail Simulation II Activity	AMM 472A	1
Issues in Apparel Retail Management	AMM 493	3
Apparel Retail Simulation Activity	AMM 497A	1
<b>Total Units</b>		<b>24</b>

### Support Courses

AMM students take a variety of support courses to broaden their knowledge and provide important discipline-specific foundations for the major and respective emphasis. Support courses (Table 2.4) account for 36-40 units (around 22%) of program requirements. Of these, all but 8 to 10 units are common to both options and respective emphasis. These 'core' support courses include statistics, costing/accounting/ data management, Science, Spanish or Chinese as a foreign language, and leadership. Three are AG designated classes: an introduction to college (for freshmen) agriculture in modern society, and ethical issues in food, agriculture and apparel. Five support courses are also GE designated courses. If students use these to fulfill their GE requirements, they may then select replacement courses from a list of Restricted Electives. The latter include a range of courses from the College of Business Administration, plus a number of AMM courses that include independent study, field study, and elective internship.

In addition to the core support courses, Apparel Production-Fashion Design Management emphasis students are required to take two courses in art and one in entrepreneurship while apparel production-International Apparel Management emphasis students are required to take additional course in statistics and one production management course. Fashion Retail students need to take two additional courses in marketing.

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Table 2.6: Required Support Courses

<b>Course Name</b>	<b>Course Number</b>	<b>Units</b>
<b>Common Support Courses</b>		
Orientation to the College of Agriculture	AG 100	1
Industrial Costs & Control or Financial Accounting for Decision Making or Accounting for Agribusiness	IME 239 ACC 207/207A ABM 324	3 4/1 4
Leadership	MHR 450	4
Statistics with Application ( GE Area B4)	STA 120	4
Consumer Chemistry General Chemistry (GE Area B1,B3) or Fundamentals of Physics (GE Area B1)	CHM 101/101L CHEM 121/121L PHY 102	3/1 3/1 4
Spanish or Chinese (GE Area C3)	FL xxx	4
Agriculture and the Modern World (GE Area D2)	AG 101	4
Ethical Issues in Food, Agricultural & Apparel Industries (GE Area C4 or D4)	AG 401	4
<b>Additional Support Courses for Apparel Production- Fashion Design Management Emphasis (10 units)</b>		
Introduction to Drawing or Introduction to Design	ART 140A ART 150A	3 3
Foundations of Drawing or Intro to the Computer as medium	ART 141A ART 155A	3 3
Creativity and Entrepreneurship	MHR 321	4
<b>Additional Support Courses for Apparel Production – International Apparel Management Emphasis (8 units)</b>		
Data Management for Agribusiness or Managerial Statistics	ABM 375 or TOM 302	4 4
Prod Control/Lab or Work Analysis & Des./Lab or Operations Management	ETP 276/L IME 224/L TOM 301	3/1 3/1 4
<b>Additional Support Courses for Fashion Retailing</b>		
Principles of Marketing Management	IBM 301	4
Managerial Statistics	IBM 302	4
<b>Total units</b>	36-40 – Apparel Production 36-38 - Fashion Retailing	

Restricted Electives

The Restricted Electives (Table 2.7) include a list of courses from which students select to meet the unit requirement. There are common electives for both the Apparel Production and Fashion Retailing options while there are additional electives for specific tracks in Apparel Production option and Fashion Retailing options. AMM does offer nine common electives for both the Apparel Production and Fashion Retailing options as shown in the table below. AMM 108, AMM 120 and AMM 245 are also GE classes offered by the AMM department. AMM 476 class is offered for those who study abroad in London to use as an elective course. In addition, the independent study lower division (AMM 200), independent study upper division (AMM 400), elective internship (AMM 431), and field study course (AMM 445) are offered as common electives. The AMM 180L: Apparel Production one unit Lab is used as a core course for the

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Apparel Production students and it is offered as an elective for Fashion Retailing students who would want to learn hands on apparel construction. The field study provides students with the experience to travel to apparel support service companies, wholesale companies and retail stores. The field study alternates trips to New York and Europe annually.

Table 2.7 Restricted Electives

<b>Course No.</b>	<b>Course Title</b>	<b>Units</b>
AMM 108	Culture, People and Dress	4
AMM 120	American Demographics and Lifestyles	4
AMM 200	Special Study for Lower Division	1-2
AMM 245	Consumerism: Impact and Issues	4
AMM 299 / 499	Special Topics Courses	1-4
AMM 400	Special Study for Upper Division	1-2
AMM 431	Elective Internship	1-8
AMM 445	Field Study	1-8
AMM 476	Fast Fashion Retailing	4
CIS 101	Introduction to Micro-computing	4
EC 201	Principles of Economics	4
or EC 202	Principles of Economics	
FLXXX	Foreign Language (Spanish or Chinese)	4
FRL 201	Legal Environment of Business	4
TOM 301	Operations Management	4
TOM 309	Logistics Management	4
TOM 401	Quality Management	4
TOM 434	Purchasing Management	4
MHR 318	Organizational Behavior	4
MHR 320	Introduction to Entrepreneurship	4
<b>Restricted Electives for Apparel Production</b>		
ART 212	History of Western Art	4
ART 213	History of Western Art	4
ART 214	History of Western Art	4
ART 216	History of Asian Art	4
AMM 350	Retail Planning, Allocating and Forecasting	4
MHR 301	Principles of Management	4
MHR 405	Training and Development	4
<b>Fashion Design Management Track A</b>		
ABM 402	Agribusiness Personal Management	4
COM 103	Interpersonal Communication	4
MHR 313	First line Management	4
TH 481	History of Costume	4
<b>International Apparel Management Track B</b>		
ETP 300	Applied Total Quality Management	3
IE 392	Principles of Productivity Engineering	4
TOM 432	Production Management	4
<b>Restricted Electives for Fashion Retailing</b>		
AMM 180L	Apparel Production Lab	1
AMM 314/314A	Apparel Technical Design	2/2
IBM 302	Marketing Strategy	4

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IBM 402	Product and Brand Management	4
IBM 306	Professional Selling	4
IBM 308	Retail Management	4
IBM 411	Buyer Behavior	4
IBM 447	Retailing Problems	4
ABM 402	Agribusiness Personnel Management	4

### Minors

AMM also offers a joint Fashion Merchandising Minor with the International Business and Marketing Department. The Minor requires completion of 34-35-quarter units as detailed in Table 2.8. The minor provides students with a background in both fashion as well as business to better prepare them to seek employment in fashion related fields.

Table 2.8: Minor in Fashion Merchandising

Course No.	Course Title	Units
	<b>Required Courses</b>	<b>20</b>
AMM 101	Introduction to the Fashion Industry	4
AMM 112L	Digital Illustration for Fashion	1
AMM 210/210A	Apparel Design Analysis	2/2
AMM 357	Apparel Importing and Exporting	3
IBM 301	Principles of Marketing Management	4
IBM 441	Marketing Internship	4
<b>Group A</b>	<b>Select 2 courses from Group A</b>	<b>6-7</b>
AMM 108	Culture, People and Dress	4
AMM 230	Fashion Promotion	3
AMM 301/301L	Apparel Product Analysis	2/1
<b>Group B</b>	<b>Select 2 courses from Group B or C</b>	<b>8</b>
IBM 306	Professional Selling	4
IBM 308	Retail Management	4
IBM 447	Retailing Problems	4
<b>Group C</b>		
IBM 414	International Marketing Management	4
AMM 457	Dynamics of the Global Apparel Complex	4
IBM 415	Strategy in International Marketing	4
MHR 332	Introduction to International Business	4

### 2.c. Service Learning Courses and Honors Courses

AMM 381/L Apparel Production I (3/1) class was developed as a service learning class during this review period. In this class students learn the apparel mass production process. As a lab activity students develop baby products, which are designed, developed and mass produced to be donated to the local hospital.

**2.d. GE classes offered by the department**

During the review period AMM department offered three GE Classes in GE area D3 and D2 as listed in table 2.9 below. All these 3 courses addresses the consumer demographics, apparel and related products, their consumption, and its historical perspectives which are related to the AMM major and minor program. The AMM 108 teaches the interrelatedness of socio-psychological, economic and political/religious influences on dress in historical perspective. It addresses the cross-cultural analysis and interpretation of western and non-western clothing behavior. AMM 120 introduces the demographic issues related to family and consumer dynamics. Some topics include social, economic, and housing characteristics and address the changes to populations, ethnicities, and lifestyles. AMM 245 analyses the role of consumption in economics systems and addresses the consumer movement past, present and future viewed as a response to economic and social conditions. AMM 24d further teaches the contemporary consumer issues, information sources, legislation and protection.

Table 2.9: GE Classes offered that are not part of major program

AMM 108 (GE Area D3)	Culture, People and Dress	4
AMM 120 (GE Area D3)	American Demographics and Lifestyles	4
AMM 245 (GE Area D2)	Consumerism: Impact and Issues	4

**2.e. Curriculum Comparison**

As noted above, the AMM program was established with a business and technology focus to fill unmet needs in the California apparel production and fashion retail sectors and differentiate itself from other four-year programs offered within the state. For comparison purposes four-sister CSU institutions with apparel related programs: CSULA, CSU Northridge, CSU Long Beach, and CSU Fresno are evaluated. In addition three non-CSU apparel programs have been included: UC Davis (the only UC campus with an apparel related program), the Fashion Institute of Design & Merchandising (FIDM), and NC State University.

CSU institutions

1. CSU Los Angeles

CSULA offers a BA degree in Art with Fashion and Textiles options under the Department of Art. Within the option, there are three specializations: Fashion design, Fashion merchandising, and Textiles. All students are required to complete Art core courses and fashion core courses. Fashion core courses are concentrated on apparel design studio courses, textiles and history of costume and textiles. There is nominal coverage of apparel production and fashion retailing. CSULA offers two Graduate degrees: Art, M.A. (Master of Arts degree), and Art, M.F.A.(Master of Fine Arts). It also offers two certificate programs: Fashion, Fiber and Materials and Fashion Retail.

2. CSU Long Beach

CSU Long Beach offers a BA program in the department of Family and Consumer Sciences. The program comprises a core in Family and Consumer Sciences with two options. The Fashion Design option emphasizes on apparel design, production, quality control while Fashion

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Merchandising option focuses on product development and merchandising. A graduate program that is offered emphasize on Fashion Merchandising. Nevertheless, the program puts more emphasis on traditional fashion design elements (e.g., flat pattern, draping, and experimental apparel design) than on fashion merchandising or retailing, and is philosophically oriented towards teacher training rather than servicing industry.

### 3. CSU Northridge

CSU Northridge offers a BS degree in Family and Consumer Sciences with an Apparel Design and Merchandising options. Within the apparel option, there are three specializations: Apparel Design and Production, Apparel Merchandising, and Textiles and Apparel. Both traditional fashion design studio and CAD courses are offered. The program includes a Family and Consumer Science core and puts much more emphasis on design, production, and merchandising aspects rather than on management aspects. CSUN also offers a Master of Science degree in Family and Consumer Sciences specializing in Apparel Design and Merchandising.

### 4. CSU Fresno

CSU Fresno offers a BA degree in Family and Consumer Sciences in the Department of Child, Family, and Consumer Sciences under the College of Agricultural Sciences and Technology. Students choose an emphasis from one of three options; Family Science emphasis, Fashion Merchandising emphasis, and Home Economics Teacher Education emphasis. The curriculum for the fashion merchandising students introduces facets of the apparel industry, display techniques, social and psychological aspects of clothing, clothing construction, and fashion analysis.

### Non-CSU Institutions

### 5. UC Davis

Located within the College of Agricultural and Environmental Sciences, the Division of Textiles and Clothing at UC Davis offers: three BS degrees (in Textiles and Clothing with a marketing/economic emphasis, Textiles and Clothing with a textile science emphasis, and Fiber and Polymer Sciences); two MS degrees (in Textiles, and in Agricultural and Environmental Chemistry); one MA degree (in Cultural studies); and two PhD degrees (in Agricultural and Environmental chemistry and in Cultural studies). UCD programs focus on textile sciences, on the one hand, and social science aspects of apparel, such as gender studies and material culture studies, on the other, with an emphasis on interdisciplinary approaches. Fiber and Polymer Science major has been suspended for fall 2017 applicants; the minor in Fiber and Polymer Science will remain available to applicants.

### 6. FIDM (Fashion Institute of Design and Merchandising), Los Angeles, CA.

FIDM offers 26 Bachelor's and Associate degree programs related to the fashion and entertainment industry. Two BS degrees are Apparel Technical Design and Business Management. The Business Management resembles a generic business administration program curriculum, which does not provide the insight to understand apparel business. The Apparel Technical Design program is open to students who have earned an Associate of Arts degree from FIDM in Merchandise Product Development and teach prototype development, fit analysis, and supply chain management. The AA degrees cover the areas of Merchandising Marketing,

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Merchandise Product Development, Beauty Industry Merchandising, Graphic Design (Entertainment), Graphic Design (Branding), Digital Media, Interior Design, Fashion Design, Jewelry Design, Visual Communications, Apparel Manufacturing Management, Textile Design (Knit), Textile Design (Surface), International Manufacturing and Product Development, Film & TV Costume Design, and Theatre Costume Design. The majority of the AA programs are very much focused in the design area, although the merchandising programs are focused in merchandising theories. The courses regarding international business and technology that are required in the AMM department are not offered to the majority of students in FIDM except for the International Manufacturing and Product Development program (AA).

### 7. North Carolina State University, Raleigh, NC.

The Department of Textile and Apparel, Technology & Management at NC State University College of Textiles offers two undergraduate BS degree programs: the BS in Fashion and Textile Design and the BS in Fashion and Textile management. The former has two concentrations; Fashion Design and Textile Design. The latter has two concentrations; Textile Brand Management and Marketing, Fashion Development and Product Management. The Department of Textile Engineering, Chemistry and Science offers three BS degree programs in Textile Technology, Textile Engineering and Polymer and Color Chemistry. The curricula of these programs are built on a foundation in technology overlaid with foundations in management and applied management topics relevant to the fiber, textile, apparel and retail complex. NC State University's BS in Fashion and Textile Management program is similar to the AMM program in that it is built on a business management and technology foundation. However, NC State places greater emphasis on textiles and technology.

### Summary

Within California, the AMM curriculum is unique insofar as it is geared toward apparel business in a contemporary world rather than traditional fashion design or family science. None of the CSU programs described have the industry and technology focus that characterizes the AMM program. None of the four year programs offer the number and variety of courses in apparel production and fashion retailing, and none have the amount and range of industrial equipment that AMM possesses.

Figures 2.1 and 2.2, provides a summary strategic mapping of AMM against other selected programs in California. The AMM program continued to provide students with a thorough grounding in all aspects of the apparel business emphasizing to deliver product and process knowledge focusing on market research through product development, manufacturing, wholesale marketing, retail planning and forecasting, sourcing and buying, merchandising, supply chain and store operations management, visual merchandising and product promotion. In addition new emphasis on textile materials, coloration, digital product and process technologies were added as planned through its mission. This assures a broad understanding of apparel products and the apparel business so that graduates who work in fashion retailing will understand the perspectives, problems and focus of the apparel producers and graduates who work in apparel production fields will understand the retailer's and consumer's concerns and needs. Besides the focus on business processes, and product and process technology, the program emphasizes, international aspects of apparel business, and personal leadership and professional development. A hands-on learning-by-doing approach is evident through the very high proportion of AMM classes that have activities or labs attached to them. The ultimate expression of this approach is the capstone sequence in both options where students run a micro business related to their designated option: an apparel production micro-business and a fashion retail micro-business.



Figure 2.1: Conceptual Strategic Map of Selected California Higher Education Programs in Textiles and Apparel

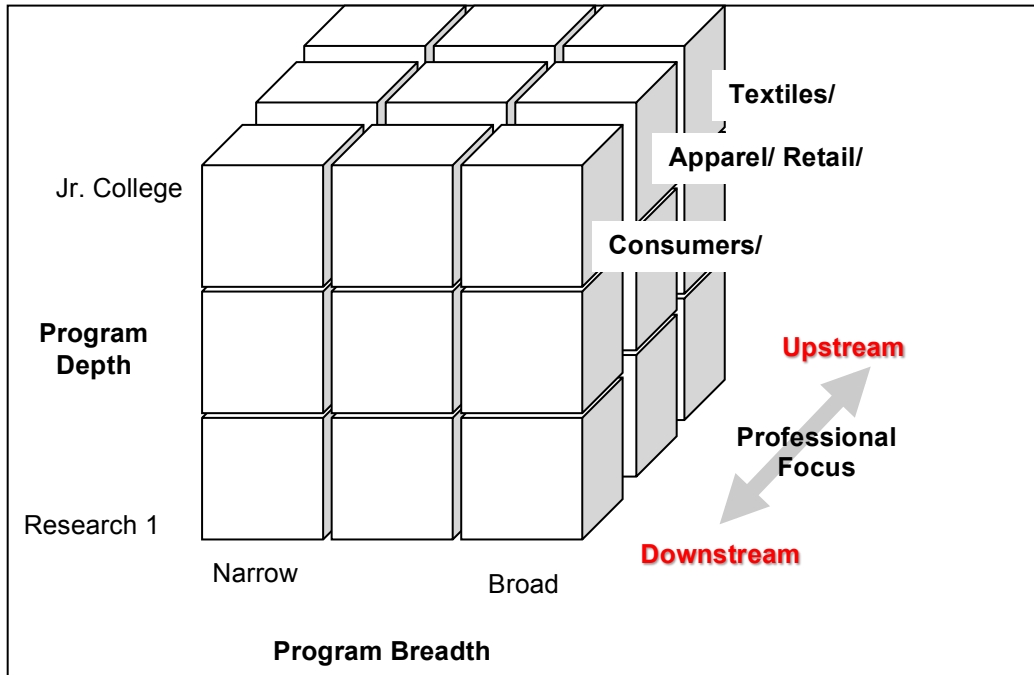
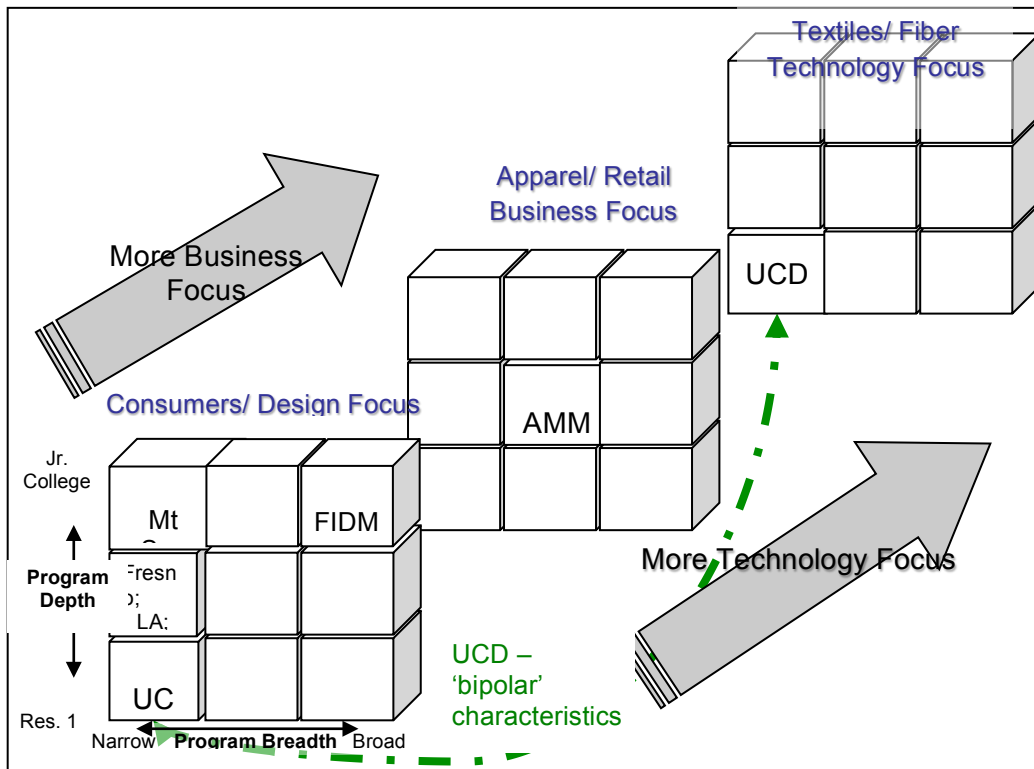


Figure 2.2: Perceived Location of AMM Relative to Other Selected California Higher Education Programs in Textiles and Apparel



In addition, direct links between student learning and the local, national and global apparel

sector is supported by involvement of AMM's industry advisory board in curriculum development, and an extensive program of industry speakers in the classroom, sites visits to companies, required internships, and field trip visits to local and foreign markets.

## **2.f. Major Curriculum Changes**

During the review period the program underwent broad curriculum changes. The faculty took comprehensive look at the industry needs and the endorsement needs of the AAFA-HRLC (Human Resource Leadership Council of American Apparel and Footwear Association) in making continuous curriculum changes as discussed below. Also, it is further discussed below how the program is changing its curriculum for semester system taking this as an opportunity to restructure the curriculum for the next 5 -10 years addressing the current business and technology needs.

### Curriculum Revisions - Core

In 2008/9, AMM 110L digital illustration lab borrowed a unit from AMM 210/A to teach computer graphics for fashion design separately that will enhance student learning to apply concepts to a variety of classes. We reinstated the AMM 160L(1): Introduction to Textiles lab as a co-requisite to AMM 160 which was lost during unit reduction to 180, to strengthen the textile end of the curriculum which faculty felt as a much needed revision.

To strengthen technical design skills, in 2009/10, the program included AMM 112L as a stand-alone course on digital fashion illustration. The department negotiated with companies for the acquisition of new generation Computer Aided Design, Product Life Cycle Management and Enterprise Resource Planning systems with the objective of creating an integrated solution that students can learn, practice and master as they move through the curriculum. However, due to the cost and the complexity of such a system that needs considerable amount of data populated prior to implementation and due to complexity of linking the system to multiple classes to understand the life cycle management of the product, it was postponed to a later time.

To strengthen textile education, a one unit laboratory class was reinstated to complement Textile Science (AMM 160) for 2009/10. The unit was taken from AMM 230, Fashion Promotion. The rationale for this change was that students were not receiving enough reinforcement in the area of textiles, which limited their understanding of textiles. In 2012/13, AMM 260/L (3/1): Textile Fabrication course was added to the Core to strengthen the knowledge of textile structures and their properties. This addition was needed based on learning outcome assessment of students as the department moved towards strengthening its textile curriculum. In the same year, AMM 360/A: Textile Specification Buying course was restructured and the course description was modified to represent the changes. In 2014/15, the name was changed from Textile Specification Buying to Textile Specification Testing in addition to changing the activity to a lab class to become AMM 360/L (2/2). This revision provided more accurate description of the course content and represented a broader range of textile tests performed with the addition of new equipment to enhance student learning.

In 2012/13 the content of AMM 300: Fashion Industry Dynamics was merged with that of AMM 341: Apparel Professional Development (course title changed from Internship/Career Preparation) to create a single large course in professional development and career exploration. This merged course will strengthen student knowledge in professional development, career exploration, personal development and visual communication strategies using e-portfolios.

In 2013/14 a revised course AMM 251/A: Apparel Merchandise Buying (3/1) was introduced to the Core which was a change of former AMM 250: Apparel Merchandise Buying 4-hour Lecture class. One of the obstacles in AMM 250 class observed was the student's learning ability

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outside class. Assessment of SLO's within this former class indicated that the students were struggling to apply concepts using Excel. By replacing one unit of lecture with a 2-hour activity class enabled students to practice program assignments using Excel under the instructor's supervision. Assessment of learning retention among seniors indicated the students have not maintained a good grasp of content from AMM 250. It is believed that this change would enhance retention as well as initial learning.

In 2014/15, AMM 463/A: Apparel Research Project (2/2) was added to the Core. This change was done using and integrating the two research courses; AMM 461: Senior Project I (2) and AMM 462: Senior Research Project II (2) that were offered only for Apparel Production students. This change provided more critical mass of time each week to accomplish course goals. It was also enabled the department to create one research capstone experience in a common core for the AMM program. This change also led for the Fashion Retail students to obtain expanded common research experience under the new AMM 463/A course with 4 units in place of current AMM 443A: Apparel Market Analysis and Reporting 2 unit course. In 2014/15, AMM 180L: Apparel Production Lab (1) was moved from Apparel Production - Fashion Design Management Track A - Sub plan/Option Courses to the core courses allowing all students to gain knowledge and experience in apparel construction. This change assisted the sewing skills necessary for production related courses such as AMM 301/L: Apparel Product Analysis and AMM 381/L: Apparel Production I courses. At the same time the Course title was changed from Apparel Production Lab to Apparel Construction providing a better description.

### Curriculum Revisions - Apparel Production Option

Starting 2008-09, the department introduced Fashion Design Management (FDM) and International Apparel Management (IAM) tracks to the Apparel Production option. This was done to better support the divergent interests of students in the Apparel Production program and to improve the balance between numbers of students in the two options, which were increasingly slanted in favor of Fashion Retailing. The FDM track caters to those with an interest in product development aspects of apparel production with a focus on Computer Aided Design, and garment construction techniques. Supporting this are courses on drawing and creativity and entrepreneurship. Since many transfer students have a background in design, we believed that this would also increase the attractiveness of the AMM program to this audience. The IAM track focuses on those with an interest in apparel business management. Specialist courses focus on apparel operations and supply chain management. Further, introduction of Enterprise Resource Planning (ERP) software system assisted to attract students to the IAM track. In addition, and in pursuit of the development of creative and critical thinking and communication capabilities, a senior project requirement was built into both tracks within the option. AMM 481/L, Advanced Apparel Production was re-designed to place more emphasis on apparel management information systems and new developments in apparel technology.

To provide Apparel Production seniors with an opportunity to gain experience in research and explore an issue of their own choice in greater depth than in a classroom setting, AMM 461 Senior Project I and AMM 462 Senior Project II (2 units each) were added to the option in 2008/09, (by eliminating 4 units of restricted electives in the support column).

In 2012/13 the AMM 492/A course title was changed from Apparel Production Development Simulation to Apparel Production Simulation that better describe the course content and compatible with the logic of the parallel Apparel Retail Simulation sequence.

To strengthen the manual pattern making knowledge, in 2012/13, AMM 214/214A: Introduction to Pattern making was added to Apparel Production Sub Plan option. The expectation was to strengthen the patternmaking knowledge of Apparel Production students. Assessment of learning outcomes indicated that knowledge of pattern making was inadequate.

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The 3 units were obtained from moving AMM 270/A from the Core to the Fashion Retailing Sub Plan/Option. AMM 270/A was identified as an important course for Fashion Retail option students while a “nice to do course” for Apparel Production option students. Apparel Production option students could still take AMM 270/A as a Restricted Elective.

In 2014/15, a new course AMM 201L: Advanced Apparel Construction (2) was added to the Fashion Design Management track in the Production Option as these students who are specialized in product design and construction required a more advanced class in garment construction in addition to what was provided in introductory AMM 180L: Apparel Production Lab (1).

In 2015/16, ETP 276/276L: Production Control (3/1) or IME 224/224L: Work Analysis & Design (3/1) which were offered in the International Apparel Management Track Support Courses were dropped. These optional courses were replaced by AMM 350: Retail planning, Allocating and Forecasting (4) course that is demanded by the apparel industry. This change also assisted in solving the continual course non-availability problem in the IAM area.

### Curriculum Revisions - Fashion Retailing Option

In 2012/13 the AMM 496 course title was changed from Apparel Retail Management Strategies to Issues in Retail Management Strategies representing the change of course description based on restructuring the course content.

To provide Fashion retail students with opportunity to undertake investigative studies, in 2010/ 2011, AMM 443A: Apparel Market Analysis and Reporting (3) course was added to the Fashion Retail option classes. This was accomplished by consolidating Sourcing course and Supply chain Management course into a single course.

In 2012/13, an introductory course AMM 330: Apparel Retailing was introduced to deepen Fashion Retail students’ understanding of the apparel retail industry. Assessment of senior retail students in the previous years showed that students needed an overview class before taking senior level Retail option classes. In 2015/16 the course number was changed from AMM 330 to AMM 296 while restructuring the Fashion Retail option providing advanced concepts in upper level courses and teaching AMM 330 as a sophomore level class. This number also aligned with the capstone class AMM 496. This also permitted our feeder community colleges to increase the number of courses for articulation.

In addition, assessment of student performance in AMM 454A Fashion Retail Simulation indicated that students struggled to apply concepts from the classroom to the operation of the micro-business. Therefore, in 2012/13, a new one-unit practicum course; AMM 370A: Apparel Retail Practicum activity was introduced to the Retail Sub Plan/Option. This course provided a bridge between the two experiences. The needed 4 units for these new courses were obtained from moving AMM 314/A Apparel Technical Design class from the Core to Restricted Electives for the Fashion Retail option and from the Core to the Sub plan/Option in the Apparel Production option to strengthen the pattern making and grading knowledge of the production students.

### Curriculum Revisions - Restricted Electives

In 2012/13, AMM 108: Culture, People and Dress (4) course was moved from AMM Core to Restricted Electives. This class was also included with a designation as GE Area D3 course. This change provided more flexibility in units for the AMM curriculum. The move created space in the AMM core permitting course provision of greater depth on textile fibers, yarns and fabrics, a critical area of knowledge the faculty saw as needed. This also created an option for AMM majors to take AMM 108 as a GE or as a Restricted Elective course.

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To be current and to teach the current industry trends, In 2013/14, a new course AMM 476: Fast Fashion Retailing (4) was introduced to the restricted electives of both production and retail options. This area refers to a new approach to apparel merchandising and supply chain management that has emerged over the past decade in response to market fragmentation and shortening product life cycles. This course was taught to students in the London study abroad program by an Adjunct Faculty member who is a leading consultant to the global fashion retail sector and a specialist in fast fashion retailing. After testing for three years as an experimental course for a steadily increasing number of students studying in London, it was formalized as a restricted elective. In addition, another new course; AMM 420: International Apparel Marketing Research (4) was added as a restricted elective for both production and retail options specially providing the opportunity for students attending the study abroad in London program to participate in marketing research of the UK or EU markets under the supervision of an adjunct faculty member that is a top marketing research consultant in the field. This course was also offered as experimental course before it was formalized in to the curriculum. The future objective was to ultimately offer this course in California.

In 2014/15 two new courses; AMM 448: Leadership for the Apparel Industry (1-3) and AMM 392: Apparel Operations Management were added to the restricted electives. The AMM 448 course consists of series of seminars, readings and experiential activities to develop leadership and professional skills for the apparel production and retail sectors that will enhance the marketability and career performance of students transitioning in to the industry. Students enroll in one unit per quarter for three successive quarters. . AMM 392 is an introduction to operations management course for the apparel industry that enhances the curriculum for those with an interest in apparel production management. Both courses have been previously taught under the experimental designation. In 2014/15, a unit was added to the 270A Visual Merchandising/Store Design activity course changing its units from 1 to 2. In addition the modified AMM 270/A (2/2) was moved from Fashion Retail Subplan/Option courses to Restricted Electives for both Options. The Advisory Board and alumni feedback indicated that Visual Merchandising careers have less-opportunities for graduates in these destinations. Although they remain relevant to the field it was better for the program to focus on emerging discipline areas that supported current and emerging career pathways. The AMM 443A: Apparel Market Analysis and Reporting (2) course was moved from Fashion Retail Subplan/Option courses to Restricted Electives for both Options. With curriculum revisions, this course was replaced by adding the new AMM 463/A research class to both Production and Retail Options to provide an enhanced undergraduate research experience. However, it was decided to retain this course as a Restricted Elective course as an additional research/writing experience. In addition, AMM 370 A: Apparel Retail Practicum (1) was moved from Apparel Retail Required Sub plan/Option Courses to Restricted Electives for both Options. This allowed strengthening the curriculum by enabling to add a unit to AMM 210A Apparel Design Analysis (2).

### Curriculum Revisions- Support Courses

In 2014/15, the foreign language FL XXX : Spanish or Chinese (4) course was removed from the support courses to allow to distribute the units to bolster undersized courses in the core and sub plan sections. This revision assisted many of the major courses, which were undersized and ran with three or two unit classes and did not allow adequate critical depth and breadth in adding material for critical needs. For example, a unit was added to AMM 112L: Digital Illustration for Fashion lab (2), AMM 330: Apparel Retailing (4), AMM 453: Apparel Sourcing and Supply Chain Management (4), and AMM 471 Apparel Wholesale Operations (3) allowing sufficient time to meet the course objectives and balancing the units to degree in production and retail options appropriately.

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As physical science is germane to understanding textile science and its application in Textile Specification Buying, CHM 103, CHM 121, or PHY102 were added to the support column and made one of these as pre-requisite to textile classes. This was allowed by dropping the Art class requirement from the support column and adding the ART 110, 212, 213, 214, or 216 to restrictive electives. The AMM 245 (previously FN 245), which meets GE D2 requirement, was added as support course requirement with AG 101. CHM 101/L: Consumer Chemistry (3/1) course was added as an option to the support courses group (CHM 121/L: General Chemistry or PHY 102: Fundamentals of Physics) in 2012/13 to provide additional flexibility for students to learn sciences in this area.

### Curriculum Revisions - GE

To strengthen the consumer component in the AMM program, in 2008/09, the department acquired two general education courses from the Foods and Nutrition department which are Introduction to Family Issues (AMM 120) and Consumerism: Impacts and Issues (AMM 245). The AMM 120 was redesigned to evolve it into a study of consumer demographics and its title was changed to American Demographics and Lifestyles in 2012/13. The department needed to build up enrollment to ensure course success. The content in AMM 245 was germane for students to understand changing consumer demographics, consumption, and issues.

### Curriculum revisions - AMM Minor

With new faculty and expanded curriculum a range of new courses were introduced that will strengthen the minor. This also assisted to replace courses that were no longer offered by the college of business. Changed the minor making AMM 101: Fashion industry, AMM 210/A: Apparel design analysis and AMM 357: Apparel import and export as required courses. New courses were added to group A and C. For group A: AMM 108: Culture, People and Dress, AMM 230: Fashion Promotion, AMM 245: Consumerism: The movement, its impact and issues, and AMM 250: Apparel Merchandise Buying were added. For Group C: AMM 457: Dynamics of the Global Apparel Complex was added.

### New Programs - Masters Program International Apparel Management

In fall 2008/09, the faculty began the work of exploring opportunities for a Master of Science degree in Apparel Merchandising and Management. The AMM Advisory Board has been involved in the development of the proposal and student, alumni and industry surveys have been conducted to identify educational needs and potential support. The proposal was approved by the University Senate and was sent to the chancellor's office. Revisions have been requested and the faculty team is working on finalizing the degree and revising it for the semester system. It is expected to be sent for the final review in summer 2017.

### New Programs - Certificate Program

A Certificate Program was planned to be offered in Summer 2013 using existing courses in the curriculum and offering industry employees and existing students an opportunity to expand their knowledge on certain technical disciplines. The certificate course was planned to be offered through the College of Extended University. Following is the planned certificate program.

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### Curriculum revisions – Pre-requisites

In addition to major curriculum changes, course ECOs were evaluated and changed to improve SLOs. Also the pre-requisites were revisited to remove unwanted courses as pre-requisites and to add new pre-requisites to improve student course sequences as well as subject matter needs for advanced courses (Table 2.10).

Table 2.10: Pre-requisites and Revisions

Course	Pre-requisite added	Pre-requisite removed	Reason
AMM 310/A, AMM 357, AMM 380/L		AMM 300	Course content not critical and improves students' scheduling sequence
AMM 314/A (2012/13)	AMM 301/L		Knowledge of product quality needed for technical design
AMM 360/L	Chemistry (CHM 103, CHM121) or Physics (PHY102)	AMM 380/L	Considering the content need.
AMM 360/L (2012/13)	AMM 301/L		AMM 301/L is the new course number for AMM 380/L
AMM 381/L (2012/13)	AMM 301/L	AMM 360/L	Considering the subject knowledge needs
AMM 410/A	AMM 300 AMM 360/L AMM 381/L		Requirement for completion of AMM 300 level course and enforcing sequence
AMM 410/L (2012/13)	AMM 314/A AMM 381/L	AMM 300	To reflect the curriculum organization for sequence
AMM 414/A (2012/13)	AMM 381/L		To prevent junior students from enrolling when they do not have the proper background.
AMM 443A (2013/14)	TOM 302 OR FMA 375		The market research class to have knowledge in statistical methods.
AMM 455/A	AMM 300 and AMM 381/L	AMM 450 (451)	Students were taking Junior and Senior level classes.
AMM 453 (2012/13)	AMM 330, AMM 357, and Senior Status		To prevent students from leapfrogging junior courses to do the capstone sequence
AMM 453 (2013/14)	AMM 381/L		To include required knowledge and also to reflect curriculum sequence
AMM 454A (2012/13)	AMM 270/A AMM 370A		Students to have the right preparation to undertake the Retail Simulation sequence.
AMM 457 (2012/13)	AMM 330	AMM 300	Deleting AMM 300 and adding and AMM 330
AMM 471 (2012/13)	AMM 330 and Senior status		Organization of capstone sequence
AMM 472A (2012/13)	AMM 370A		To prepare students for operating the Apparelsapes Micro Business
AMM 481/L	AMM 180L		Considering the subject knowledge needs
AMM 496 (2012/13)	AMM 330, AMM 370 Senior Standing. Co-requisite: AMM 497A		To provide students with appropriate preparation and organizing the capstone sequence.
AMM 497A (2012/13)	AMM 370A		To prepare students to apply concepts from the classroom to the operation of the micro-business

## **2.g. Anticipated evolution of the curriculum**

With the addition of new faculty to strengthen the AMM program, the faculty has been seeking to enhance learning in digital product and process technologies, product and process technologies related to textiles, product life cycle management, sustainability, brand management, entrepreneurship, and undergraduate research which will define its strength for the next 5-10 years. The retail option was improved with more specialization in store management and retail business management. The department is also working with the Art department to enhance student creativity with apparel that can be achieved through digital technologies. Initial discussions were held and some consensus on developing a minor program was achieved. We are also seeking to better develop student capabilities with regard to emphasizing soft skills, computer software skills (ex: MS Excel), quantitative and qualitative analysis, problem-solving, critical thinking, digital presentation (such as video creation) and communication. Greater emphasis on student centered-learning methods and undergraduate research are important dimensions of these efforts. A number of major curricular changes introduced in recent semester conversion proposals provide the anticipated evolution of the curriculum. The changes with its objectives are discussed below.

### Curriculum Revisions - Semester Conversion

Instrumental changes are made to the existing AMM program for semester conversion. The current program offering was analyzed and redesigned to address changing market needs of apparel industry. During the redesign process, following objectives were emphasized for curriculum redesign, course re-design and designing new courses:

- 1- Increased focus on quantitative and data analytics skills
- 2- Increased focus on research and interpretation skills
- 3- Increased focus on textiles
- 4- Increased focus on future technologies in apparel, retail and textiles
- 5- Increased focus on novel business management skills in apparel, retail and textiles

### AMM Core:

AMM specific first year experience course was added (AMM-1000) which used to be a college-level first year experience course for all majors. To enhance technical skills, lab courses are expanded to provide more practice time. For example: AMM-1120/L is expanded from two (quarter) unit activity to one (semester) unit lecture and two (semester) unit activity course. Students learn adobe creative suites in this course. All courses were reviewed and aligned to increase research related activities.

### Option Courses:

The new program structure includes increased emphasis areas as well as a new option in Textiles. New courses were developed to provide specialized learning for each emphasis area. Specifically, following changes are made in the AMM options:

### Fashion Retail Option:

Fashion retailing option is split into two emphases areas:



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- 1- Fashion Retail Management: Focus on retail selling related careers.
- 2- Fashion Retail Merchandising: Focus on Merchandise planning related careers.

AMM fashion retailing graduates follow two distinct career paths, that of a retail buyer or of a store manager. Courses in the two-emphasis areas focus on specific needs of the two career tracks persuaded by our students.

Fashion retail management emphasis includes courses related to Digital Commerce (AMM-3750, new course), Store Planning and Management (AMM-4700, new course) and International Fashion Retailing (AMM-4960, expanded).

Fashion Merchandising emphasis trains students in buying and sourcing strategy (AMM-3500, expanded) as well as Merchandise planning and allocation (AMM-4500, new course). This emphasis also includes a course in wholesale operations (AMM4710).

In addition, the option course structure was rearranged providing students to select a course between visual merchandising (AMM 2700/A) or the new Apparel brand management (AMM 3300) course in addition to existing supply chain management (AMM 4530) and combined 3 unit fashion retail simulation activities (AMM 4970A).

### Apparel Production Option:

Production option remains split into 2 emphasis areas: one focusing on careers related to apparel production and the second directed towards careers in apparel operations and logistics. Following changes are made to production option.

- 1- The senior capstone courses in apparel product development simulation (AMM 4140L) and apparel production simulation (AMM 4920L) were modified to lab only courses to increase hands on learning time.
- 2- Emphasis 1 is renamed to 'Apparel Product Development' from 'Fashion Design Management'
- 3- Fashion Product Development emphasis focuses on technical skills related to production technology. Students will learn manual and 2D pattern making (AMM 3140/3140A), CAD and 3D pattern making (AMM 3900A) and digital textile and apparel design (AMM 3120A). Each course also has increased lab/activity hours to provide more practice on digital/technical skills taught.
- 4- Emphasis 2 is renamed to 'Global Fashion Management' from 'International Apparel Management'
- 5- Global Fashion Management emphasis maintains focus on operations management. A new fashion operations management (AMM 3920) course is added to the curriculum and the supply chain management course (AMM4530) is broadened to include topics related to sourcing. More choices are provided for the third course under this emphasis depending on the peripheral area of interest of a student. For the third course, students can choose between a brand new Apparel/Textile Sustainability course (AMM2150) or Apparel Brand Management course (AMM 3300), which is also a new addition to the curriculum, or Creativity and Entrepreneurship (MHR 3210) course offered by the management department.
- 6- Considering student feed back, Advanced Apparel Production (AMM 481/L) course will be added to the option courses so that all production students in both emphasis can

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benefit from this course, which covers career heavy MRP, ERP and Production Planning areas.

### Textiles Option - New

A new Textile option is added to the program, which will focus on advance understanding of textiles and coloration. Textiles are a big part of the apparel industry in California. An understanding of textiles also helps in other apparel jobs related to product development, production and retail buying. Currently, there is no textile-focused program in the Southern California region. The AMM team felt a need to address this gap and introduce an option that can provide deeper understanding of textile materials and processes. In addition to textile and Apparel Digital Design course (AMM3120A), textile option will include two new advanced level textiles courses: Textile Coloration (AMM 4600/L) and Innovative Textiles (AMM 4680/L).

### Other changes:

Sophomore level GE courses, under the current required support courses list, are added as directed GE courses in the new curriculum. Restricted Electives are removed from the new curriculum by making the following GE courses directed GE's: CHM 1010/L, or CHM 1210/L, or PHY 1020 (GE B1/ B3); STA 120 (GE B4); AG 4010 (GE C4 or D4); AMM 1080 or AMM 1200 or AMM 2450 (GE Area D3). This was decided to reduce the ambiguity of students as to what courses are required to complete the degree and to reduce the complexity of course selection. This will also enhance the graduation rates and will provide effective advising opportunity for students.

### **2.h. Curricular Bottlenecks and Efforts to Alleviate**

The AMM 251/A: Apparel Merchandise Buying is now a three-unit lecture class and one-unit activity class. The course comprises of considerable amount of math and as a core course it was found to be a difficult course to pass. This was taught as a 4-unit lecture course. The changes were made to give students more face-to-face time and helping them with more assistance. Further the instructor has made changes to teach the calculations using MS Excel. Further, the faculty has pre-recorded lectures that will assist students to access them any time. The faculty has written two proposals and secured grants thus far to get SPICE grants to further develop this course to provide assistance to students in this course.

AMM 463/A: Apparel Research Project (2/2) is now a core class that teaches research methods and during the activity students conduct a quarter long research project. Most students pass the activity but struggle in the lecture. This course was first introduced in the production option during the review period as two 2-unit courses and later added to the core based on the emphasis on developing research skills. By providing 2 units lecture and 2 units activity, the face-to-face time was increased to assist students to get more help from faculty. The faculty has changed the course textbook several times seeking an easy to understand undergraduate research methods book. Faculty also has created online resources to make students succeed.

2.i. Often Required and Elective Courses Offered in the Past 4 Years

Table 2.11: Often required and Elective Courses

Course title	Course no	Units
<b>Core</b>		
Fashion Industry	AMM 101	4
Digital Illustration for Fashion lab	AMM 112L	1
Intro to Textile Science	AMM 160/160L	3/1
Apparel Design Analysis	AMM 210/210A	2/1
Fashion Promotion	AMM 230	3
Apparel Merchandise Buying	AMM 251/251A	3/1
Textile Fabrication	AMM 260/260L	3/1
Apparel Product Analysis	AMM 301/301L	2/1
Design and Merchandising Strategies	AMM 310/310A	2/1
Apparel Professional Development	AMM 341	3
Apparel Importing & Exporting	AMM 357	3
Textile Specification Buying	AMM 360/360A	2/2
Apparel Production I	AMM 381/381L	3/1
Internship	AMM 442	3
Dynamics of the Global Apparel Complex	AMM 457	4
<b>Apparel Production Option Courses</b>		
Apparel Production lab	AMM 180L	1
Introduction to Pattern Making	AMM 214/214A	1/2
Apparel technical Design	AMM 314/314A	2/2
Apparel Product Development	AMM 410/A	2/2
Apparel Pre-Production II	AMM 414/414A	2/2
Apparel Sourcing and Supply Chain Management	AMM 453	3
Senior project 1	AMM 461	2
Senior project 2	AMM 462	2
Advanced Apparel Production	AMM 481/L	3/1
Apparel Product Dev. Simulation	AMM 492/A	2/2
<b>Fashion Retailing Courses</b>		
Visual Merchandising/Store Design	AMM 270/270A	2/1
Apparel Retailing	AMM 330	3
Retail Planning, Allocating and Forecasting	AMM 350	4
Apparel Retail practicum	AMM 370A	1
Apparel market Analysis and Reporting	AMM 443A	2
Apparel Sourcing and Supply Chain Management	AMM 453	3
Apparel Retail Simulation I Activity	AMM 454A	1
Apparel Wholesale Operations	AMM 471	2
Apparel Retail Simulation II Activity	AMM 472A	1
Issues in Apparel Retail Management	AMM 493	3
Apparel Retail Simulation Activity	AMM 497A	1
<b>Electives</b>		
Culture, People and Dress	AMM 108	4
American Demographics and Lifestyles	AMM 120	4
Apparel Production Lab	AMM 180L	1
Special Study for Lower Division	AMM 200	1-2

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Consumerism: Impact and Issues	AMM 245	4
Special Topics Courses	AMM 299 / 499	1-4
Apparel Technical Design	AMM 314/314A	2/2
Special Study for Upper Division	AMM 400	1-2
Elective Internship	AMM 431	1-8
Field Study	AMM 445	1-8
Fast Fashion Retailing	AMM 476	4

Reason for any courses that have not been offered at least every 2 years

All core, production and retail option courses were offered every year during the program review period unless curriculum reviews were done in the recent years such as for example merging AMM 461 and AMM 462 to create AMM 463 class. With regard to Restricted Electives that include a list of courses from which students select to meet the unit requirement, AMM offered eleven electives as shown in the table. Other than courses offered as needed such as AMM 200, 299, 499, 400, 431, and 445, which are for special studies, special topics, elective internship or field studies, all other courses were offered every year. The field study provides students with the experience to travel to apparel support service companies, wholesale companies and retail stores. AMM 476 was offered every year for those students who go on London study abroad program.

2-Year Schedule for Semester Conversion Curriculum

The Table 2.12 shows the planned two year semester schedule starting from Fall 2018.

Table 2.12: Two-Year Schedule for Semester Conversion

Course	Course No	2018	2019		2020	
		FALL	SPRING	FALL	SPRING	
AMM First Year Experience	AMM 1000	X		X		
Introduction to the Fashion Industry	AMM 1010	X	X	X	X	X
Digital Illustration for Fashion	AMM 1120/1120L	X	X	X	X	X
Introduction to Textile Science	AMM 1600/1600L	X	X	X	X	X
Introduction to Fashion Retailing	AMM 2200	X	X	X	X	X
Integrated Fashion Communication	AMM 2300	X	X	X	X	X
Fashion Retail Buying-1	AMM 2500	X	X	X	X	X
Fashion Retail Buying-1Practicum	AMM 2510A	X	X	X	X	X
Textile Fabrications	AMM 2600/2600L	X	X	X	X	X
Apparel Construction and Quality	AMM 2800/2800L	X	X	X	X	X
Design & Merchandising Strategies	AMM 3100/3100A	X	X	X	X	X
Internship/Career Preparation	AMM 3410	X	X	X	X	X
Apparel Production	AMM 3810/3810L	X	X	X	X	X
Internship	AMM 4420	X	X	X	X	X
Dynamics of the Global Apparel Complex	AMM 4570	X	X	X	X	X
Apparel Research Project	AMM 4630/4630A	X	X	X	X	X

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Data Management for Fashion Business	AMM 3550		X		X
Apparel Product Development Simulation	AMM 4140A	X		X	
Apparel Production Simulation	AMM 4920A		X		X
Textile and Apparel Digital Design	AMM 3120A		X		X
Apparel Technical Design	AMM 3140/3140A	X		X	
CAD for Patternmaking	AMM 3900/3900A		X		X
Fashion Operations Management	AMM 3920	X		X	
Fashion Supply Chain Management	AMM 4530		X		X
Advanced Apparel Production	AMM 4810/4810L		X		X
Fashion Retail Simulation	AMM 4970A	X	X	X	X
Digital Commerce For Fashion Business	AMM 3750	X	X	X	X
Fashion Store Planning and Category Management	AMM 4700	X	X	X	X
International Fashion Retailing	AMM 4960	X	X	X	X
Fashion Retail Buying-2	AMM 3500	X	X	X	X
Fashion Retail Planning and Allocation	AMM 4500	X	X	X	X
Apparel Wholesale Operations	AMM 4710	X	X	X	X
Textile Quality Assurance	AMM 3600/3600L	X	X	X	X
Textile Coloration	AMM 4600/4600A	X	X	X	X
Sustainable and Innovative Textiles	AMM 4680/4680A	X	X	X	X

**Summary**

With the addition of new faculty to strengthen the AMM program, the faculty have been seeking to enhance the BS program in AMM evidenced by the extensive curriculum changes over the review period. The department regularly pursued advice from the industry advisory board and HRLC of AAFA, enthusiastically monitored the industry dynamics in business and technology related to the field and continuously assessed the SLOs to revise the curriculum and add new courses. The faculty has been seeking to enhance in digital product and process technologies, product and process technologies related to textiles, product life cycle management, sustainability, brand management, entrepreneurship, and undergraduate research which will define its strength for the next 5-10 years.

Further, we have been seeking to better develop student capabilities with regard to emphasizing soft skills, computer software skills (ex: MS Excel), quantitative and qualitative analysis, problem-solving, critical thinking, digital presentation (such as video creation) and communication. Greater emphasis on student centered-learning methods and undergraduate research are important dimensions of these efforts. A number of major curricular changes introduced in recent semester conversion proposals provide the anticipated evolution of the curriculum. We have made rigorous but instrumental changes to the existing AMM program for semester conversion. During this process the current program offering was analyzed and redesigned to address changing market needs of apparel industry. During the redesign process, we followed steps to achieve the following objectives for curriculum redesign, course re-design and designing new courses: Increased focus on quantitative and data analytics skills, Increased

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focus on research and interpretation skills, Increased focus on textiles, Increased focus on future technologies in apparel, retail and textiles and Increased focus on novel business management skills needed in apparel, retail and textiles.

### 3: PROGRAM ASSESSMENT

#### 3.a Accreditation Status or Other External Assessment

The Human Resource Leadership Council (HRLC) of the American Apparel and Footwear Association (AAFA) continuously endorsed the Apparel Production program during the review period. The AAFA has industry-established criteria including curriculum competencies and equipment minimums needed for a quality program. They also review such things as faculty, advisory boards, funding, and facilities. The AMM Apparel Production Option was originally written using the AAFA guidelines and it was approved by the AAFA in 1997. In 2002 and 2007, AMM went through its five-year program reviews. AMM received a strong endorsement in 2002 and a satisfactory endorsement in 2007. The last 5-year review was submitted to AAFA in 2012. In the past, the HRLC used a two-step review process for granting endorsements. However, the information provided in 2012 was so complete that a second review was deemed unnecessary by the executive committee and a very strong endorsement was received. The AAFA program review affects ten core courses. The review board highlighted AMM strengths in industry overview, product development, production and textiles. The review board acknowledged the growth of the program in areas related to costing, production scheduling, material utilization, spreading, work measurement, methods engineering, finishing, and information systems, which were highlighted as the improvement areas in the 2007 review process.

This endorsement also qualified AMM program to receive scholarship funds from the AAFA Educational Foundation for the next five years. However, in 2014, AAFA decided to move the scholarship program to YMA (The Young Men's Association) scholarship program and continues to do so till date. YMA scholarship program is a case study competition based scholarship program where AMM students are invited to apply every year. The shift from original scholarship program to YMA competitive scholarship was also a result of a re-organization process at AAFA where Production Program endorsement was discontinued in 2013.

There is no accrediting body for Fashion Retailing. AMM has an industry Advisory Board, which reviews changes to the AMM curriculum every spring term. We present the senior retail sequence changes to the board, which they review and approve as appropriate.

#### 3.b Program's Student Learning Outcomes

The faculty revisited and revised the Program Learning Outcomes and corresponding Student Learning Outcomes during the review period. This revised list of PLOs and SLOs are discussed below.

*Program Learning Outcome 1:* The program will provide knowledge of apparel and textile products, processes, and related technologies.

*PLO 1 Student Learning Outcomes:*

- 1.1 Comprehend the historic development and influence on present and future trends of the global apparel production and distribution sector
- 1.2 Comprehend interrelationship among suppliers, producers, retailers, and consumers
- 1.3 Comprehend the relationship among fashion, basic, staple, and seasonal goods on production
- 1.4 Comprehend the integration of creative design, technical design, customization, and mass production

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- 1.5 Analyze impact of technology on product development, merchandising, markets and production, and multi channel distribution
- 1.6 Know the basic generic fibers, yarn structures
- 1.7 Comprehend labeling laws and regulations for domestic and international markets
- 1.8 Evaluate fabric performance based on fiber content
- 1.9 Evaluate the compatibility of textile materials
- 1.10 Create textile print design using technology
- 1.11 Analyze stitch and seam structures relative to material, garment design, equipment, quality and cost
- 1.12 Comprehend basic sizing systems based on body proportions of men, women, children and special dimension needs
- 1.13 Evaluate fit relative to specific end use, aesthetics, and comfort
- 1.14 Evaluate application, use, and performance of various stitch and seam classes as identified in US std and 752a and ASTM 9263
- 1.15 Comprehend the use and application of the basic categories of sewing equipment: lock, chain, cover, overedge, safety, tacker, and multi-needle

*Program Learning Outcome 2:* The program will provide students with an understanding of aesthetics and consumer behavior as they apply to the textile and apparel industries.

*PLO 2 Student learning Outcomes:*

- 2.1 Know the basic principles and elements of design.
- 2.2 Are able to analyze aesthetic qualities of apparel products, visual promotional materials, and retail environments.
- 2.3 Understand the relationship of consumer demographics and its impact on consumption and choice behaviors.
- 2.4 Analyze and evaluate needs and aesthetics of different market segments and develop product lines and promotion plans.

*Program Learning Outcome 3:* The program will provide students with an understanding of how the industry meets the needs and wants of consumers, markets, and society at large in an interdependent global economy.

*PLO 3 Student Learning Outcomes:*

- 3.1 Comprehend retail customer and consumer behavior and what constitutes value in a product or service from the perspectives of the manufacturer, retailer and consumer
- 3.2 Comprehend the interdependence within the firm's functional areas relative to inventory level, turn time, gross margin, reorder points, cost-volume analysis and marginal analysis
- 3.3 Evaluate global and domestic marketing strategies and channels of distribution relative to the mission of the firm, target customers and product life cycles
- 3.4 Comprehend the use of Information technology and Management Information Systems in the apparel sector
- 3.5 Comprehend the application of technology in gathering, manipulating, analyzing, and managing data flow through the sewn products industry
- 3.6 Evaluate domestic and international sourcing options considering human resources, transportation communication, production capabilities, political influences, cost quality control legal, logistics, and technology
- 3.7 Comprehend the apparel production and distribution sector in a global context
- 3.8 Comprehend the implications of international regulations and alliances and trade policies that affect international marketing and sourcing
- 3.9 Comprehend all factors affecting legal compliance including human rights and



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environmental issues

- 3.10 Analyze cultural, economic, and political factors that impact international marketing and sourcing

*Program Learning Outcome 4:* The program will cultivate the development of professional attitudes and provide graduates with skills so they will be able to function and behave in a professional manner in the competitive apparel industry.

*PLO 4 Student Learning Outcomes:*

- 4.1 Express information (for example, ideas or facts) to individuals or groups effectively, taking into account the audience and nature of the information (for example, technical, sensitive, controversial); make clear and convincing oral presentations.
- 4.2 Are professional in their approach and utilize appropriate professional terminology.
- 4.3 Use imagination to develop new insights into situations and apply innovative solutions to problems; develop new methods where established methods and procedures are inapplicable or are unavailable
- 4.4 Are thorough when performing work and conscientious about attending to detail
- 4.5 Show understanding, friendliness, courtesy, tact, empathy, concern, and politeness to others; develop and maintain effective relationships with others; may include effectively dealing with individuals who are difficult, hostile, or distressed;
- 4.6 Organize work, set priorities, and determine resource requirements; determine short- or long-term goals and strategies to achieve them; coordinate with other organizations or parts of the organization to accomplish goals; monitor progress and evaluate outcomes of assignments
- 4.7 Display high standards of ethical conduct and understand the impact of violating these standards. Responsibilities of being a global citizen and role of citizens in a democratic society.
- 4.8 Identify rules, principles, or relationships that explain facts, data, or other information; analyze information and makes correct inferences or draw accurate conclusions

### **3.c. Matrix of Courses Meeting Student-Learning Outcomes:**

Once the faculty revisited and revised the program learning outcomes and student learning outcomes, the courses that shelter these outcomes were identified. This process also led to revisiting assessment based on WASC guidelines. The department also visited the Bloom's Taxonomy guidelines for learning objectives. The learning objectives were identified with Introductory, Practice and Mastery levels. Table 3.1 and 3.2 indicate the SLO assessment matrix for the Fashion Retailing and Apparel Production options.

### **3.d. Process for Assessing the Learning Objectives, Courses and Curricular Structures**

It was a common practice that during every weekly faculty meetings the faculty discusses student learning outcomes, courses and curricular structures and decisions are made so as to what changes are necessary to improve the learning of the AMM program. As a team, we observe, discuss and create opinions and accordingly restructure the curriculum based on collective qualitative faculty feedback.

The AMM department utilizes a broad array of tools to assess learning including pre-tests (covering pre-requisite knowledge), assignments/ embedded questions in exams and tests, faculty observation and discussion, student interviews, and employer feedback as discussed below in section 3.f.

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Fashion Retailing Option

Table 3.1 SLO Assessment Matrix for Fashion Retailing Option. (I = Introduced; P= Practiced; M= Mastered)

AMM SLOs	101	108	112L	160/L	210/A	230	250	270/A	300	310/A	314/A	350	357	360/A	380/L	381/L	431	441	442	443	453	454A*	457	471	472A*	496	497A*
1.1	I																						PM				
1.2	I	I					I		P			P	P									M	M	M	M	M	M
1.3	I						P		P			P										M	M	M	M	M	M
1.4											I,P						M										
1.5	I	I									I	P			P							P		M	M		
1.6	I			P											M												
1.7	I			I									P		P												
1.8															PM											P	P
1.9															PM												
1.11			I							I	P						I,P	P									
1.12																	I										
1.13	I																										
1.14																	IM										
1.15																I,P											
2.1					I			PM																	M		
2.2					I		I	PM					P											M	P		P
2.3	I					I,P		I,P		P			M										P	M	M	M	P
2.4												P											M	M	M	M	M
3.1	I					I	I			I	P			P	I							I	P	M	P	I	P
3.2											I	PM											M		M	M	M
3.3											I		I										M		M	M	M
3.4				I		I			I	P	P						P					I	P	P	M	P	P
3.5																											
3.6																											
3.7	I											P											P				
3.8																								P			
3.9																								M			
3.11						I	I	I							I												I
3.1																							P		M		
4.1	I	I				I			I		P		P								M		M		M	M	M
4.2									I				P										P		M	M	M
4.3									I		I		P										P		M	M	M
4.4	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	M	M
4.5	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	M	M
4.6	I	I	I	I	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	M	M	M	M	M	M
4.7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	M	M	M
4.8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	P	M	M	M	M	M

Apparel Production Option (I = Introduced; P= Practiced; M= Mastered)

Table 3.2 SLO assessment Matrix for Apparel Production Option. (I = Introduced; P= Practiced; M= Mastered)

AMM SLOs	101	108	112L	160/L	180L*	210/A	230	250	270/A	300	310/A	314/A	357	360/A	380/L	381/L	410A*	414/A	431	441	442	453**	457	461	462	481/L**	492/A	
1.1	I	I														I							PM					
1.2	I									P			P										M				P	M
1.3	I										P												M					M
1.4												I,P				M										P	M	
1.5	I	I																										
1.6	I			P											M													
1.7	I			I										P	P												M	
1.8															PM									P			P	
1.9															PM									P			M	
1.11			I								I	P																
1.12	I															I,P		P									M	
1.13																	I											
1.14																												
1.15					I											I,P												
2.1						I				PM																		
2.2						I				PM																		
2.3	I						I,P		I,P		P												M					
2.4																											M	
3.1	I						I	I			I	I			P	I				PM								
3.2																								I				
3.3																								P				
3.4				I		I				I	P	P					P						I				PM	
3.5																												
3.6																								P				
3.7	I																							P				
3.8																									M			
3.9																												
3.11							I	I	I																			
3.1																								P	M			
4.1	I	I								I		P												M	P	M		
4.2																								M	P	M		
4.3										I		P												M	P	M		
4.4	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	P	M	
4.5	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	P	M	
4.6	I	I	I	I	I	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	M	P	M	
4.7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	M	P	
4.8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	M	M	

**3.e. Procedures for Collecting and Analyzing Evidence to Achieve Program Goals and Objectives**

We informally have a direct and an indirect approach to evaluate if the students have achieved the program goals and objectives.

Direct Approach:

1. Senior Capstone Courses: Decisions are made based on observational assessment of Senior Capstone courses. Both, production and fashion-retailing option, students run micro businesses, which are great assessment tools reflecting their cumulative learning in the AMM major.
2. Assessment of the Internship: The internship class is mandatory and structured to evaluate student learning from the employer and the instructor. Each intern’s supervisor and a co-worker provides feedback on the intern’s work performance via the internship assessment form.
3. Peer Evaluation of Faculty: The faculty peer evaluation of teaching form includes an assessment of course SLOs so as to make certain that the learning objectives are being assessed as planned per Table 3.1 and 3.2 above.

Indirect Approach:

1. Employer feed back: The faculty and the department chair keep a close relationship with the industry and the internship instructor visits the internship sites as a part of the instructor responsibilities.
2. Alumni feed back: The department is making every effort to keep the alumni connected. The department chair has established a departmental connection with many existing alumni through the Linked-In professional networking site.

**3.f. Summary of Assessment, Conclusions and Changes to the Program**

The Table 3.3 summarizes new assessment methods introduced in the 5-year period of program review and the type of data collected. The table also discusses examples of such efforts, expected level of achievements set as targets, conclusions made based on the results and action taken for curriculum changes.

Table 3.3: Examples from assessments, conclusions and changes for year 2010, 2011 and 2012

Year	Type	SLO	Examples and Conclusions from Assessment and Changes to the Program based on Assessment	Target level/ Achievement
2010	Direct: Data on coursework assignments tied to specific SLOs	1.1	Evaluated in AMM 457 Dynamics of the Global Apparel Complex via exam question: “With reference to the theoretical models discussed in the early part of the course explain how changes in the business environment over the last 50 years have resulted in radical changes in the strategies and organizational structures of companies in the textile and apparel industries of the	Class mean to be C/ Class mean for the question was C+ (n= 29) Some 18% of the class scored below C.

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			industrialized nations.”	
		1.4	An assessment of learning outcomes in 2009-10 indicated that knowledge of patternmaking (technical design) among Apparel Production majors was inadequate. It was decided that reorganizing a core course on Fashion Promotion as Fashion Retail option class could create space to strengthen the Apparel Production option. A sophomore level class, AMM 214/214A Introduction to Pattern Making was developed and proposed for insertion in the 2012/13 curriculum year. Apparel Production students may still take Fashion Promotion as an elective in the support column.	
	Indirect: <ul style="list-style-type: none"> <li>Data from survey of faculty regarding student performance</li> <li>Feed back from the internship companies/Employers</li> </ul>	4	Professional attitudes and skills.  The survey results are discussed below.	Expected excellence/ Program improvement/ Developing department policies that are to be implemented by including in syllabi of every instructor
	Minutes of faculty meeting on program quality/ learning outcomes	All	Program improvement/Curriculum changes requested in 2010/11. Refer to curriculum changes discussed in section 2.f.	
2011	Direct: Data from pre-tests of pre-requisite knowledge		Pre-tests for AMM 310, 314, 360, 381, 410, 453, and 457	Retain pre-requisite knowledge by all AMM students/ Implemented by majority of faculty teaching these courses.
	Direct: Evaluation of final projects/ assignments and embedded exam questions for a selection of 25% of program SLOs	1.5, 1.6, 1.7, 1.8, 2.2, 3.3, 3.4, 4.0	Comprising SLOs: 1.5 in AMM 457; 1.6 AMM 160/L and AMM 360/A; 1.7 in AMM 357; 1.8 AMM 360/A; 2.2. AMM 270/A; 3.3 in AMM 457; and 3.4 in AMM 314/A, AMM471 and AMM 481/L; and SLO 4 via a faculty survey.	Benchmark is that 100% of students will gain a grade C or better/ No data to support evidence
	Indirect: Formal discussions of student learning in special AMM faculty meetings and Minutes of faculty meeting on program quality/		Program improvement/Curriculum changes requested in 2011/12. Please refer to curriculum changes discussed in section 2.f.	

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	learning outcomes			
	Indirect: Data from survey of faculty regarding student performance (See below) Feed back from the internship companies/Employers	4	Professional attitudes and skills. Discussion on developing a leadership program.  The survey results are discussed below.	Expected excellence/ Program improvement/ Developing department policies that are to be implemented by including in syllabi of every instructor
2012	Direct: Data on coursework assignments tied to specific SLOs	1.2	Evaluated in AMM 453. In the term project, students develop a case study of a clothing or footwear company's sourcing and supply chain management policies. They identify issues facing the company and make recommendations on how its policies may be adapted and improved. Evaluation is based on depth and quality of information retrieved, and, the application of concepts from the class to the problem, the quality of analysis, and the professionalism of the final written and oral presentation.	As part of the capstone, the assessment benchmark is that 100% of students will gain a grade C or better. In 2011, the attainment was 79% with a C or better; in 2012, attainment was 100% achieved a C or better.
	Direct: Data on coursework assignments tied to specific SLOs and data from pre-tests of pre-requisite knowledge	3.2	AMM 250 Apparel Merchandise Buying. In Fall 2011 students struggled to apply concepts relating to inventory management, and mark-up. The instructor also noted poor pre-test data on file for AMM 350 (based on pre-requisite knowledge from AMM 250) indicating that learning retention was weak. After in-class discussions, the instructor determined the root of the problem was the inability of the majority of students to use formulas in Excel, despite course pre-requisite requirements. The instructor determined that students needed more practice in class. As a result a curriculum change was proposed for 2013/14 to convert AMM 250 from a 4 hour lecture to a three hour lecture with a 1 hour computer lab. This provided the instructor with more face-to-face time to assist students in practicing Excel applications in class. The loss of lecture/ discussion time was counterbalanced by migrating some materials to an online environment where students can reviewed course material before coming to class.	
	Indirect: Data from survey of faculty	4	Professional attitudes and skills. Discussion on developing a leadership program.  The survey results are discussed below.	Expected excellence/ Program improvement/ Developing

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			department policies that are included in syllabi of every instructor and implemented uniformly.
	Indirect: Minutes of faculty meeting on program quality/ learning outcomes and informal faculty performance evaluation of the capstone micro businesses where students synthesize and integrate program learning to manage a business operation.		1.A problem of transfer student knowledge was highlighted that resulted in a major community college altering its curriculum to better prepare students for retail math. 2. Another problem highlighted related to retention of CAD skills from AMM 112L and was decided to make a curriculum change and increase the number of units in AMM 112L from 1 to 2. Program improvement/Curriculum changes requested in 2012/13. . Please refer to curriculum changes discussed in section 2.f.

Faculty Survey: The department conducted a faculty survey to evaluate general faculty perception on student’s performance on the SLO 4 on professional attitudes and skills with a 6-point likert scale (1- Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree 5-Strongly agree, and 6-Can not comment). The sample size for 2011 and 2012 surveys were 5 and 6 faculty members respectively.

Survey Questions:

1. Can express information (for example, ideas or facts) to individuals or groups effectively, taking into account the audience and nature of the information (for example, technical, sensitive, controversial)
2. Can make clear and convincing oral presentations.
3. Are professional in their approach
4. Utilize appropriate professional terminology.
5. Use imagination to develop new insights into situations and apply innovative solutions to problems
6. Develop new methods where established methods and procedures are inapplicable or are unavailable
7. Are thorough when performing work.
8. Are conscientious about attending to detail.
9. Show understanding, friendliness, courtesy, tact, empathy, concern, and politeness to others
10. Develop and maintain effective relationships with others
11. Can effectively deal with individuals who are difficult, hostile, or distressed
12. Can organize work, set priorities, and determine resource requirements properly.
13. Can determine short- or long-term goals and strategies to achieve them.

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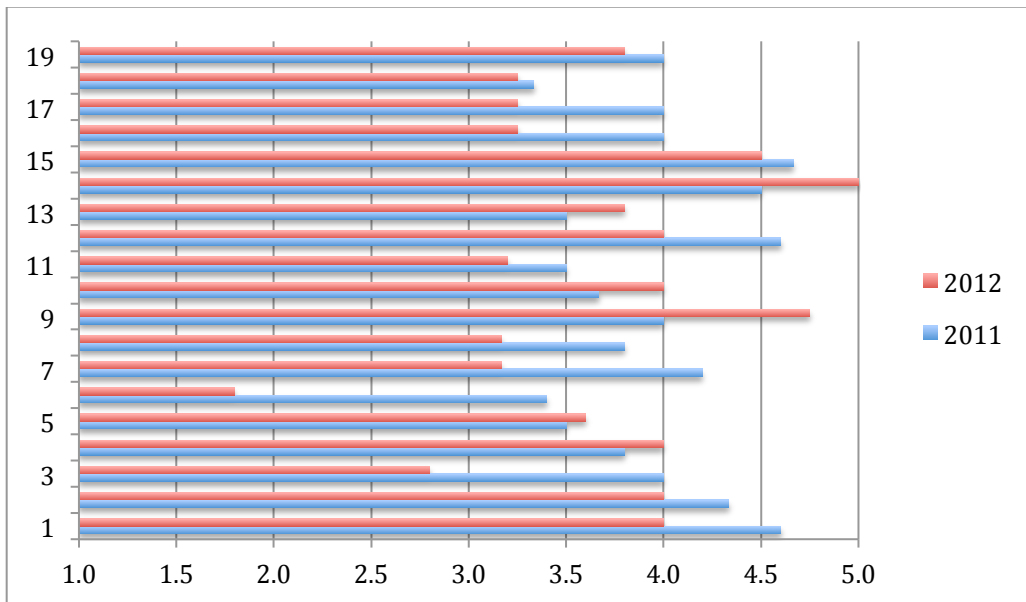
14. Can coordinate with other others to accomplish goals
15. Can monitor progress of a task.
16. Can evaluate outcomes of assignments
17. Display high standards of ethical conduct and understand the impact of violating these standards.
18. Can identify rules, principles, or relationships that explain facts, data, or other information
19. Can analyze information and makes correct inferences or draw accurate conclusions

Fig 3.1 shows the faculty response for the survey. In general 2012 results show less agreement of student capabilities across almost all question areas. In 2012 several department policies related to professional attitudes were introduced and faculty members had higher expectations of student performance in this aspect. This may have caused the 2012 scores to be lower in general than 2011. The lowest scores in the area of disagreement are from question no 3 and question no 6, which discuss the professional approach and the ability to develop new ways of handling work. Faculty strongly agree that students

- a. show understanding, friendliness, courtesy, tact, empathy, concern, and politeness to others
- b. can organize work, set priorities, and determine resource requirements properly
- c. can coordinate with others to accomplish goals and
- d. can monitor progress of a tasks.

Most of the faculty members were in agreements on almost all questions on the survey. To develop the soft skills and leadership skills that AMM students should have, department launched the AMM Leadership program (AMM 448). This program focuses on developing leadership and professional skills for the apparel production and retail sectors. It enhances the marketability and career performance of AMM students. This program acquaints students with topics like: the characteristics of a good leader, learn how authentic leaders lead, evaluate their leadership skills, develop a plan for improving their leadership skills, and create effective teams.

Fig 3.1: Faculty survey results on SLO 4: Professional Attitudes and Skills



## **Summary**

The Human Resource Leadership Council (HRLC) of the American Apparel and Footwear Association (AAFA) continuously endorsed the Apparel Production program during the review period. AMM is one of the 13<sup>th</sup> programs endorsed by the AAFA nationally. The faculty revisited and revised the program learning outcomes and student learning outcomes identifying the courses that shelter these outcomes. This process also led to revisiting assessment based on WASC guidelines. The department also visited the Bloom's Taxonomy guidelines for learning objectives. The learning objectives were identified with Introductory, Practice and Mastery levels. As a continued effort, the faculty also revisited the procedures for assessment criteria identifying direct and indirect approaches. Assessment decisions were made based on these approaches. Direct and indirect assessment methods were derived such as pre-tests for courses that need pre-requisite knowledge and faculty survey to identify faculty perception on student learning in addition to continued direct assessment system. Further, the faculty identified specific SLOs and corresponding courses to cover 25% program SLOs as a pilot and identified the projects, assignments, and embedded exam questions. The benchmarks were created to analyze if the program is achieving its goals. In addition, understanding the soft skills and leadership students should have, department launched the AMM Leadership program (AMM 448) which is designed to develop leadership and professional skills for the apparel production and retail sectors that will enhance the marketability and career performance of AMM students.



#### 4. PROGRAM QUALITY

##### 4.1 Faculty

##### 4.1 a. Assessing the Quality of Teaching

###### Instructional Assessment

The instructional assessment questionnaire used by the department is shown in Table 4.1.1. below. This questionnaire was not revised during the review period.

Table 4.1.1: AMM Instructional Assessment Questions

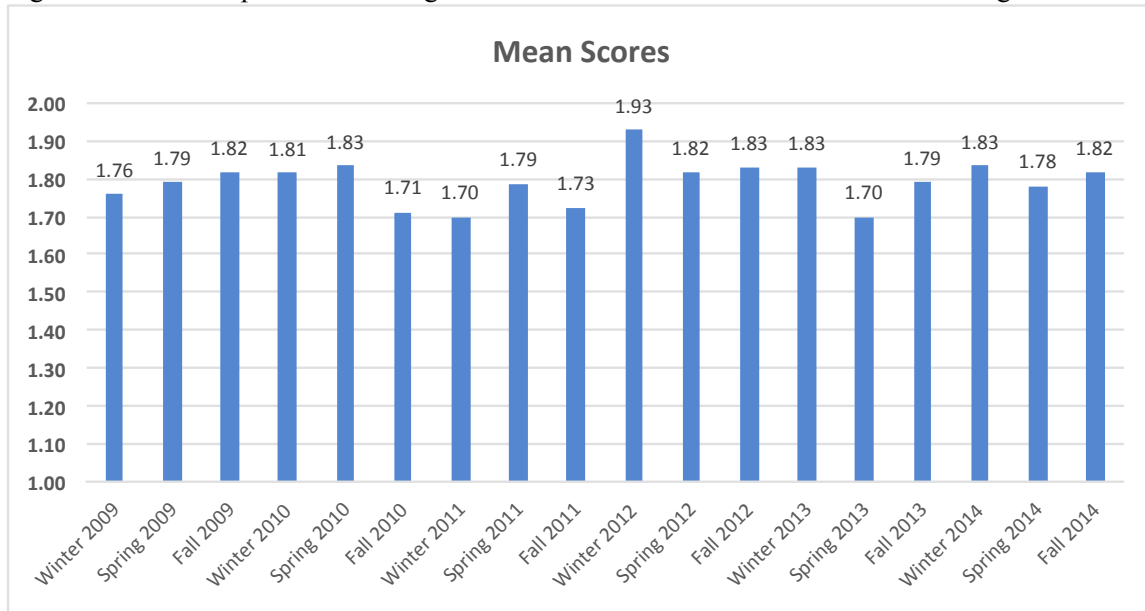
1) How clear, complete and organized are course materials including syllabi and lecture handouts? 2) Did the instructor keep to the course schedule and make good use of the entire class time? 3) Is the instructor organized and prepared for class each day? 4) Are the lectures presented in an easy-to-understand manner? 5) Were a variety of teaching techniques used (chalkboard, demonstration, visual aids, group discussions, presentations, etc.)? 6) Does the instructor show enthusiasm and create interest in the subject? 7) Was course material clearly related to industry? 8) Was industry technology used or explained, if applicable to course content? 9) How well do lecture, activities and/or laboratory assignments enhance the lectures and readings? 10) How clear and complete are the instructions for assignments, activities and/or laboratories? 11) How would you rate the learning value of the assignments? 12) How well does the instructor answer student questions? 13) How available is the instructor for consultation by students and/or reasonably responsive to e-mail inquiries? 14) Were assignments and exams returned in a reasonable amount of time? 15) How well are exams related to course material? 16) How clear and complete were grading criteria and how fairly did the instructor evaluate students? 17) What grade do you expect from this class---- A=very good, B=good, C=satisfactory, D= poor, F=very poor 18) How well do the classroom facilities and equipment support and enhance learning?				
<i>Instructional Assessment Scoring Rubric:</i>				
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Very Good</i>	<i>Good</i>	<i>Satisfactory</i>	<i>Poor</i>	<i>Very Poor</i>

###### Computer Generated Discipline Averages

Figure 4.1.1 and 4.1.2 represent the instructional assessment data showing the discipline averages and average scores for each question assessed by the students respectively.

The AMM program average scores for the review period are less than 1.93 as expected by the college target of 2.0. The department has maintained mean score range from 1.70-1.93 during this period (Figure 4.11).

Fig 4.1.1: AMM Department Averages of Course Evaluations for Winter 2009 through Fall 2014



Evaluation of the Results:

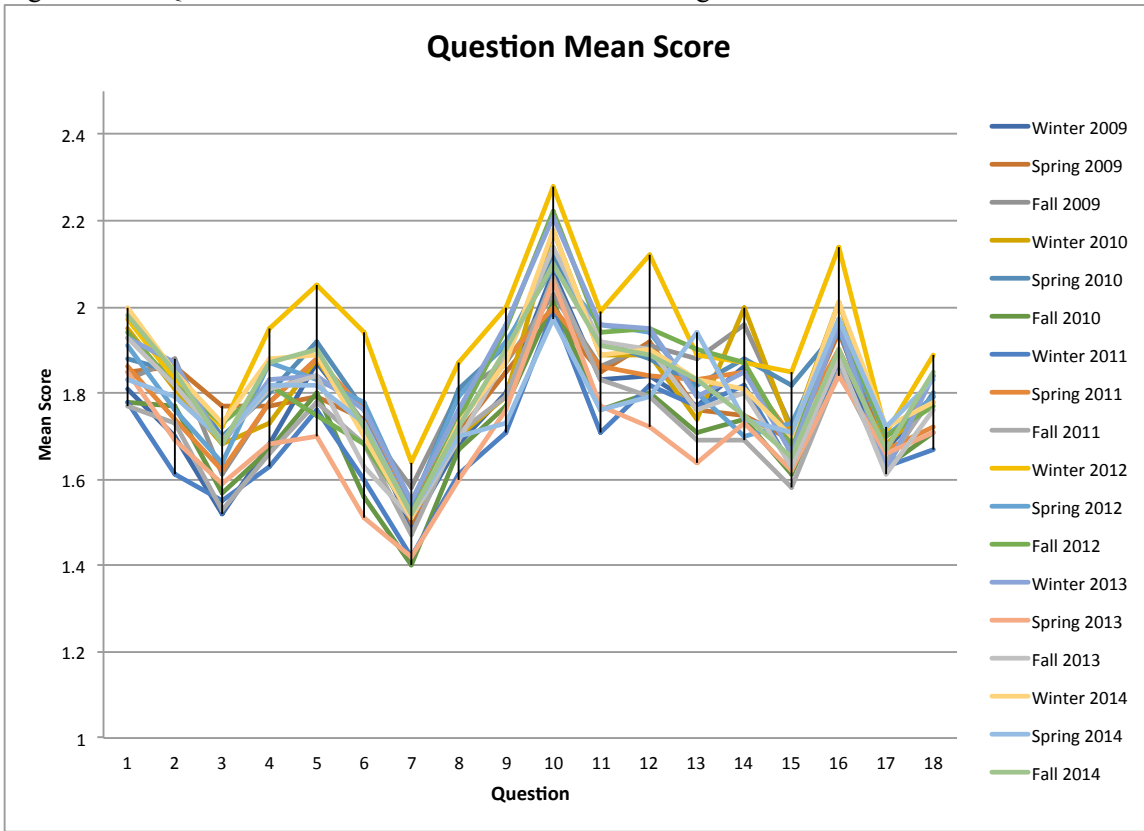
Students gave the best scores (lower values or values <2.00) for how well the instructor has performed relate to questions 2-8, and 11 which evaluate the course schedule, effective use of class time, material organization, class preparation, teaching effectiveness relate to enthusiasm, interest, easy to understand explanations, use of variety of teaching techniques, use of industry related course material, use of industry related technologies, and the value of learning assignments. Further, students acknowledge that the instructors respond effectively, were available for student queries and that the exams were related to the course materials. Students also acknowledge that the classroom facilities and equipment were reasonably available and assisted in learning.

For one instructional quarter, students gave somewhat marginal scores (=2.00) for questions 1, 9 and 14 that represent the effectiveness of the course material, how well the lectures and activities/labs enhance the learnings and instructor’s responsiveness in terms of returning graded exams and assignments respectively. However, in other quarters these were in the expected range, which is less than 2.00.

For questions 12, 16 and 10 the student average scores represent somewhat poor performance of the faculty where the scores range from 2.00 – 2.28. These questions are related to how well the instructor answers student questions (2.12), how clear and complete are grading criteria and instructor fairness in grading assignments (2.14) and how clear and complete the instructions for assignments/activities/laboratories (2.28).

Overall, student instructional assessment results show acceptable teaching and learning effectiveness across all quarters during the review period and beyond.

Figure 4.1.2: Question Mean Score for Winter 2009 through Fall 2014



Distinguished teaching awards:

The department conducts a student survey every year to select the “Teacher of the Year” and present the award during the end of the year banquet. During the review period the following faculty were awarded the teacher of the year award (Table 4.1.2). Also during the review period, in 2013-14 academic year, the department nominated Dr. Senanayake for the College Teacher of the Year award.

Table 4.1.2: Student selected Teacher of the Year Awardees

Year	Teacher of the year
2008/09	Dr. Linda Tucker
2009/10	Dr. Linda Tucker
2010/11	Prof. Alejandra Parise
2011/12	Dr. Muditha Senanayake
2012/13	Prof. Deborah Johnson
2013/14	Prof. Teri Faraone
2014/15	Dr. Muditha Senanayake

#### 4.1.b. Faculty Research and Scholarly Activity

As the department recruited new tenure-track faculty the scholarship productivity has improved. Yearly scholarship achievements are listed below.

##### 2008/2009

- Im, H., Lennon, S. J., & Stoel, L. (2008). "The effect of perceptual fluency on online shoppers behavioral intent." ITAA annual conference. Schaumbert, IL, November.
- Senanayake M.M. & Little T.J. (2008). "Mass Customization: Points and Extent of Apparel Customization". Journal of Fashion Marketing and Management (accepted with minor revisions).
- Senanayake, Muditha & Juwano, Inanta. (2008). The Future of Fashion through Mass Customization: Practices in the US Market. Poster paper presented at the Southern California Conference on Undergraduate Research (SCCUR), Pomona, CA.
- Tucker, LB, "ITAA Curriculum Meta-Goals" Curriculum Committee Report to the ITAA Conference, Chicago, Nov 2008.

##### 2009/2010

- Chi, T; Kilduff, PDF; Gargeya, VB; and Dyer, CL. (2009) "Business Environment Characteristics, Competitive Priorities, Supply Chain Structures, and Business Performance: An Empirical Study of the U.S. Technical Textile Industry" International Journal of Intercultural Information Management. Issue: Volume 1, Number 4 / 2009, pp 407–432.
- Chi, T; Kilduff, PDF; and Gargeya, VB; (2009) "Alignment between business environment characteristics, competitive priorities, supply chain structures and firm business performance" *International Journal of Productivity & Performance Management. (In Press)*
- Regan, C., (2009) "Teaching product development: Linking apparel design strategy to seasonal product line creation." Paper accepted for presentation at the International Textile and Apparel Association conference, Bellevue, Washington.
- Senanayake, Muditha (2009). "Apparel Configuration Options for Mass Customized Apparel Manufacturing." Paper accepted for presentation at the International Textile and Apparel Association conference, Bellevue, Washington.

##### 2010/2011

###### *Peer reviewed journal papers:*

- Im, H., & Lennon, S. J., & Stoel, L. (2010). The perceptual fluency effect on pleasurable online experience. *Journal of Research in Interactive Marketing*, 4(4), 280-295.
- Im, H., & Ha, S. (2010) "An exploration of the cognitive-affective model of satisfaction in a shopping context: A testing of competing models. *The Service Industries Journal*. 31(13) Available online: 28 Sep 2010, DOI:10.1080/02642069.2010.504983.
- Chi, T; Kilduff, PDF; (2010) "An empirical investigation of the determinants and shifting patterns of U.S. apparel imports using a gravity model framework" *Journal of Fashion Marketing and Management*, Volume: 14, Issue: 3.
- Senanayake, M. M. & Little, T.J. (2010). Mass Customization: Points and Extent of Apparel Customization, *Journal of Fashion Marketing and Management*. Volume 14, Issue 2.

## Apparel Merchandising & Management Program: Five Year Review 2008/09 – 2013/14

### *Presentations - Peer reviewed*

- Heimler, R., (2010) “College Graduate, Faculty, and Human Resource Manager Attitudes of the Importance of Skills Acquired in College and Needed For Job Performance and Career Advancement Potential”, Refereed abstract in the Proceedings of the Hawaii International Conference on Education, Honolulu, Hawaii, January 7<sup>th</sup>-10<sup>th</sup>.
- Ha, S., & Im, H. (2010). A multi-level investigation of the effects of congruence in an apparel shopping context.” Refereed abstract in the Proceedings of the International Textiles and Apparel Association (ITAA) Annual Meeting, Montreal, Canada.
- Im, H., & Ha, Y. (2010). The effect of interactivity on student learning: Creating flow experience.” Refereed abstract in the Proceedings of the International Textiles and Apparel Association (ITAA) Annual Meeting, Montreal, Canada.
- Ha, S., & Im, H. (2010). “A multi-level investigation of the effects of congruence in an apparel shopping context.” International Textiles and Apparel Association (ITAA) Annual Meeting, Montreal, Canada, October 27<sup>th</sup>-30<sup>th</sup>.
- Argueta, C and Kilduff, P. (2010) “The Evolution of National Textile Industries: The Influence of Factor Endowments”. Refereed abstract in the proceedings of the Southern California Conference for Undergraduate Research, Pepperdine University, Malibu, CA.
- Regan, C. & Roberts, R. (2010). “Teaching apparel technical design: A professor and student’s perspective.” Refereed abstract in the proceedings of the International Textiles and Apparel Association (ITAA) Annual Meeting, Montreal, Canada.
- Heimler, R., (2010) “College Graduate, Faculty, and Human Resource Manager Attitudes of the Importance of Skills Acquired in College and Needed For Job Performance and Career Advancement Potential.”, Hawaii International Conference on Education, Honolulu, Hawaii, January 7<sup>th</sup>-10<sup>th</sup>.
- Hernandez, E. & Regan, C. (2010) “CAD Programs to Assist in Early Stages of Design Process.” Refereed abstract in the proceedings of the International Textiles and Apparel Association (ITAA) Annual Meeting, Montreal, Canada.
- Zhang, Y., Raheja, A. & Senanayake, M. (2010). “Digital Camera Based Automated Human Body Measurements.” Proceedings of the IPCV'10 - 14th International Conference on Image Processing, Computer Vision, & Pattern Recognition, Las Vegas, NV.
- Senanayake, M (2010). “Community Service Learning as a strategy for improved learning effectiveness.” Poster paper in the proceedings of the 13th CSU Symposium on University Teaching, Teaching Resource Center, CSU San Bernardino, CA.
- Zhang, Y. Senanayake, M. & Raheja A. (2010). “Development of a Single Camera Body Scanning System”. Refereed abstract in the Proceedings of the International Textiles and Apparel Association (ITAA) Annual Meeting, Montreal, Canada.
- Vang, M. & Senanayake, M. (2010). Consumer barriers to apparel mass customization, Refereed abstract in the proceedings of the Southern California Conference for Undergraduate Research, Pepperdine University, Malibu, CA.
- Senanayake, M. (2010). “Consumer barriers to the acceptance of apparel mass customization.” Provost’s Symposium on Faculty Scholarship and Teaching, Cal Poly, Pomona, December 10th.

### 2011/2012

#### *Peer Reviewed Journal Papers and Abstracts in Proceedings*

## Apparel Merchandising & Management Program: Five Year Review 2008/09 – 2013/14

- Im, H., & Ha, Y. (2011). The effect of vividness and involvement on engagement: Moderating role of gender. Abstract published in *Proceedings of International Textiles and Apparel Association (Online)*. [www.itaonline.org](http://www.itaonline.org).
- Ha, Y., & Im, H. (2011). Student acceptance of an interactive online activity: The effect of hedonic and utilitarian values. Abstract published in *Proceedings of International Textiles and Apparel Association (Online)*. [www.itaonline.org](http://www.itaonline.org).
- Ju, H., Im, H., & Johnson, K. (2011). Measuring visual attention to online shopping websites using eye tracking. Abstract published in *Proceedings of International Textiles and Apparel Association (Online)*. [www.itaonline.org](http://www.itaonline.org).
- Chi, T; and Kilduff, P.; (2011) “Understanding Consumer Perceived Value of Casual Sportswear: An Empirical Study” *Journal of Retailing and Consumer Services*, Volume 18, Issue 5, September 2011, Pages 422-429
- Senanayake, Muditha, & Little, Trevor. (2011). "Modeling & Simulation of MP-MC Apparel Manufacturing". *Proceedings of the 2011 World Conference on Mass Customization, Personalization, and Co-Creation*, Nov 16-19, 2011, San Francisco, CA, USA.
- Senanayake, Muditha. (2011). "Apparel Mass Customization: Barriers to Strategic Growth". (Accepted/withdrawn) *Proceedings of the International Textile & Apparel Association Annual Conference*, Nov 3-6, 2011, Philadelphia. USA.

### *Presentations at Professional Conferences*

- Im, H.\*, & Ha, Y. (2011). The effect of vividness and involvement on engagement: Moderating role of gender. *Poster presented at International Textiles and Apparel Association 2011 annual meeting in Philadelphia, PA.*
- Ha, Y.\*, & Im, H\*. (2011). Student acceptance of an interactive online activity: The effect of hedonic and utilitarian values. *Poster presented at International Textiles and Apparel Association 2011 annual meeting in Philadelphia, PA.*
- Ju, H.\*, Im, H., & Johnson, K. (2011). Measuring visual attention to online shopping websites using eye tracking. *Poster presented at International Textiles and Apparel Association 2011 annual meeting in Philadelphia, PA.*
- Kilduff, PDF. (2011) “Current Developments in the US Apparel and Textile Sectors” Keynote Presentation to the “Summit Forum on the Global Textile Economy”, Dong Hua University, Shanghai, June 22<sup>nd</sup>.
- Senanayake, Muditha, and Little, Trevor. (2011). "Modeling & Simulation of MP-MC Apparel Manufacturing". 2011 World Conference on Mass Customization, Personalization, and Co-Creation, San Francisco, CA, USA.

### 2012/2013

#### *Peer Reviewed Journal Papers*

- Chitra Srivastava Dabas, Brenda Sternquist and Humaira Mahi, (2012). “Organized Retailing in India: Upstream Channel Structure and Management”, *Journal of Business and Industrial Marketing*, 27(3), pp. 176-195.
- Yun, Zee-Sun, Dawn Thorndike Pysarchik and Chitra Srivastava Dabas, (2012), “The Determinants of Retail Loyalty of Indian Consumer”, *Journal of Food Products and Marketing*, 18(4), pp.
- Heimler, R., Rosenberg, S., & Morote, Elsa-Sofia (2012). Predicting Career Advancement. *Journal of Education & Training* 54(2)

## Apparel Merchandising & Management Program: Five Year Review 2008/09 – 2013/14

- Rosenberg, S., Heimler, R., & Morote, Elsa-Sofia (2012). Basic Employability Skills: A Triangular Design. *Journal of Education & Training* 54(1)

### *Presentations*

- Munguia, Natalie & **Senanayake Muditha**, (2012). Fit Customization for Apparel: The Use of Foot Scanning as a Method of Enhancing Consumer's Purchasing Decision. Proceedings of the Southern California Conference on Undergraduate Research (SCCUR) 2012, CSU, Channel islands, Camarillo, CA
- Kilduff, PDF, Heimler, R and Harder, F, (2012) "Current Situation of the LA Apparel Industry: A Survey of Executives" Presentation to an industry audience at fashion Business Inc., California Market Center, Los Angeles, March 26<sup>th</sup>.
- Kilduff, P and Srinivas S. (2012) "Ensuring Convergence in a Bottom-up Approach to Strategic Planning (the Cal Poly Pomona Experience)" WASC Academic Resource Conference, Costa Mesa, CA, April 19<sup>th</sup>.
- Erkan Ozkaya and Chitra Srivastava Dabas, '*An Assessment of Hierarchical Linear Modeling in International Business*', presented at Academy of Marketing Science (AMS) Conference May 2012, New Orleans, LA.
- Chitra Srivastava Dabas and Brenda Sternquist, '*Retail Employee Perception of Corporate Social Responsibility: How much is too much?*', presented at AMA/ ACRA Conference, May 2012 (Joint conference by the American Marketing Association Retailing & Pricing SIG and the American Collegiate Retailing Association), Seattle, WA.

## 2013/2014

### *Peer Reviewed Journal Papers*

- Erkan Ozkaya, Chitra Dabas, Kalin Kolev, Tomas Hult, Steven Dahlquist and Sonia Manjeshwar (2013), "An Assessment of Hierarchical Linear Modeling in International Business, Management, and Marketing", *International Business Review*, 22(4), 663-677.

### *Presentations at Professional Conferences*

- Heimler, R and Kilduff, P "Graduates of Agricultural Programs Attitudes Regarding Basic Employability Skills: 2013" Poster presentation to the California Agricultural Research Institute, Showcase, Pomona, November 7th, 2013.
- Heimler, R and Kilduff, P "Attitudes Regarding Basic Employability Skills Among Graduates of Agricultural Programs: A Pilot Study" NACTA, Blacksburg, VA, June 25<sup>th</sup> – 29<sup>th</sup>, 2013.
- **Senanayake, Muditha**, & Class, Mary. (2013). Need Analysis – Information Technology Literacy Skills for Non-Majority College Students. *Proceedings of the International Textile & Apparel Association Annual Conference*, Oct 15-18, 2013, New Orleans, Louisiana.
- **Senanayake, Muditha**, (2013). Apparel Mass Customization: Barriers to Strategic Growth. *Proceedings of the International Textile & Apparel Association Annual Conference*, Oct 15-18, 2013, New Orleans, Louisiana.

Professional Awards and Honors and Funded Research Projects

2010/11:

*Awards and Honors*

H Im

- Paper of Distinction Award, International Textiles and Apparel Association (ITAA) 67<sup>th</sup> annual conference
- Presidential Travel Award, Cal Poly Pomona
- Academic Writing Grant, Cal Poly Pomona

M Senanayake

- President's Travel Award, College of Agriculture, Cal Poly, Pomona
- Nominated by the Honor Society of Agriculture GAMMA SIGMA DELTA for membership in recognition of high scholarship, outstanding achievement or service
- College of Agriculture, Advisor of the Year 2010/11.

*Awards and Honors Earned by Students (as a result of faculty involvement)*

- Christa Argueta, Ronald E. McNair Scholar 2010. Mentor: P Kilduff.
- Mai Vang, Ronald E. McNair Scholar 2010. Mentor: M Senanayake.

*External Grant Applications*

- Heimler, R and Kilduff, PDF, "Skills and Competencies Needed by Graduates of Agricultural Programs for Entry-Level Employment in the California Agricultural Sector" Agricultural Research Initiative. Total project value \$23,880 (ARI \$11,940) and in kind match of \$11,940 from the US Forestry Service. Status: funded.
- Heimler, R, Kilduff, PDF, and Merlino, N, "Focus On the Future: Cultivating a Multicultural 21st Century Workforce in the U.S. Agricultural Sector." USDA/NIFA HSI Education Grants Program. Value: \$299,960 (no in-kind). Status at 6/30/11: recommended for funding
- Im, H and Regan C. University of California / California State University / Community College Collaborations on New Agriculture, Environment and Human Sciences Projects. Total project value: \$10,000. Status: not funded.
- Senanayake, M. and Raheja, M., "Need Analysis: Assessing Technology Literacy Skills for Hispanic and other Minority College Students". University Of California / California State University / Community College Collaborations on New Agriculture, Environment and Human Sciences Projects. Total project value: \$10,000. Status: funded.



## **Apparel Merchandising & Management Program: Five Year Review 2008/09 – 2013/14**

- Regan, C. (Winter 2010). Use of portable digital devices in the creative design process supported by a grant from ARI sponsored release time (\$10,600).

### *Internal Grant Funds*

- Im, H “Effect of online interactive instructional materials on student engagement and learning experience”. RSCA Funds. Value \$4,972. Status: awarded.
- Senanayake, M. “Automated body measurement extraction using 2-D photographs” RSCA Funds, \$4,994. Status: awarded.

### 2011/12:

#### *External Grant Applications*

- Heimler, R (PI) and Kilduff, PDF (Co-I) and Merlino, N (Co-I) “Focus on the Future”, USDA HSI Grant. Amount requested: \$299,000. Status: Awarded \$289,000.
- Heimler, R (PI) and Kilduff, PDF (Co-I) “Reducing Barriers in Distance Learning Technologies for Students with Disabilities” Kellogg Legacy Project Endowment Amount requested: \$78,750.

### 2012/13:

#### *Awards and Honors Earned by Students (as a result of faculty involvement)*

- Rachel Broguiere, Young Menswear Association National Case Study Scholarship Competition winner

#### *External Grant Applications*

- Heimler, R (PI) Kilduff PDF (CoI) “Skills and Competencies Needed by Graduates of Agricultural Programs for Entry” Agriculture Research Institute. \$11,752. Funded.
- Heimler, R (PI) “Reducing Barriers in Online Courses for Students with Disabilities” \$79,783. Not funded.
- Heimler, R (PI) “Focus on the Future: Sowing the Seeds for a 21<sup>st</sup> Multicultural Workforce in the Agriculture Sector” USDA HSI. \$249,981. Not funded.
- Heimler, R “Supporting Development of Multicultural Leaders for the US Agricultural Sector “National Institute of Food and Agriculture Multicultural Scholars Program, \$179,998. Not funded.

### 2013/14:

#### *Honors and Awards*

- Senanayake, M. Selected by the Center for Community Service Learning under the service learning Faculty Fellowship program. AMM 381/L designated a Service Learning Course.

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- Senanayake, M. Certificates of Completion for training in AIMS360’s Enterprise Resource Planning software.
- Regan, C. Certificates of Completion for TukaCAD 2D and 3D patternmaking software

### *Internal Grants*

- Dabas, C. ICE grant for Innovative approaches to instruction (December 2013), \$3335.68. for designing, video recording and transcribing the excel lecture modules for AMM-251A Apparel Retail Buying.
- Heimler, R, \$12,000 for moving the introduction to all AMM classes online. Students are required to view the online introduction before they attend the first class session. This permits hereby instructors to begin teaching content on day one. Thirteen AMM faculty participated and 56 courses covering 80 sections were modified to move the course introduction online.

### *External grant applications*

- Heimler, R (PI) Kilduff PDF (CoI). Kellogg Legacy, \$79,500. Not funded
- Heimler, R (PI) Kilduff PDF (CoI) Agriculture Research Institute. \$16857. Funded.

## 4.1.c Typical Annual Work Load

Table 4.1.3 shows the typical annual work load held by the faculty during the review period.

Table 4.1.3: Annual Workload

Faculty Member	Teaching WTU	Assigned WTU for Scholarship service	Administrative WTU	Total WTU
Peter Kilduff (Since 2008/09)	13.5 (9m)	16.5	30	60 (12m)
Cindy Regan (2008/09 – 2013/14)	36	9	0	45
Muditha Senanayake (Since 2008/09)	36	9	0	45
Huynjoo Im (2008/09-2011/12)	36	9	0	45
Chitra Dabas (Since 2011/12)	36	9	0	45
Jianging Che (Since 2013/14)	36	9	0	15
Linda Tucker (Since 2008/09)	45	0	0	45

## 4.1.d Faculty Service

Since the department had a small faculty cohort over the review period, service commitments have generally been significant. All full time faculty participated in student advising, curriculum development, program assessment, faculty search, etc. and served almost all of the committees in the department. All tenured faculty have served continuously on RTP committees. Table 4.1.4

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list the service commitments made to the department, college and the university while Table 4.1.5 list the commitments made as a service to the professional organizations during the review period since 2008/2009.

Table 4.1.4 AMM Faculty Service to the University, College and Department

<b><i>Jiangning Che</i></b>	
AMM Textile Sub-Committee Chair	2013/14-2014/15
AMM Search Committee Member	2013/14
AMM Department Committee Member	2013/14
AMM Curriculum Committee Member	2013/14
AMM Planning & Management Committee Member	2014/15
University - Library Advisory Council Member	2014/15
<b><i>Chitra Dabas</i></b>	
AMM M.S. (International Apparel Management) proposal committee	2011/12
AMM Department Chair Review Committee	2011/12, 2012/13
AMM Department New Faculty Search Committee (Started March 2012)	2011/12-2012/13
AMM Curriculum Committee	2011/12, 2013/14-2014/15
AMM Faculty Committee	2011/12- 2012/13
AMM Academic Advisor	2011/12- 2012/13
AMM Assessment Committee	2012/13
AMM Masters and Certificate Programs Committee	2012/13
AMMA Club Faculty Advisor	2012/13- 2014/15
AMM Retail Curriculum Development Committee Chair	2013/14, 2014/15
AMM GE Curriculum Development Committee Member	2013/14
AMM Planning and Management Committee Member	2013/14-2014/15
University Senate Budget Committee Member	2013/14- 2014/15
<b><i>Hyunjoo Im</i></b>	
AMM Academic Advisor	2010/11-2011/12
AMM Management Committee, member	2010/11
AMM Search Committee, member	2010/11
AMM Apparel News & Focus Days: Department's Annual Recruitment event	2010/11
AMM department committee, member	2011/12
College of Agriculture graduate studies committee, member	2011/12
College of Agriculture, Research and graduate program committee,	2010/11

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member	
University, Provost's award selection committee, member	2010/11-2011/12
University, Professional Leave Committee, member	2011/12
<b><i>Peter Kilduff</i></b>	
AMM Department Chair	2010/11 -2014/15
AMM Academic Advisor	2010/11-2014/15
AMM Management Committee, chair	2010/11
AMM Search Committee, member	2010/11-2011/12
AMM Advisory Board Liaison	2010/11-2013/14
AMM Apparel News & Focus Days: Department's Annual Recruitment event	2010/11-2011/12
AMM M.S. Proposal Committee, Chair	2011/12
AMM Department RTP Committee, Chair	2011/12-2014/15
AMM Curriculum committee	2011/12, 2013/14, 2014/15
AMM Assessment sub-committee	2011/12
AMM Faculty Committee	2012/13-2013/14
AMM Masters and Certificate Programs Committee Chair	2012/13
AMM Apparel Technology & Research Center Director	2012/13-2014/15
AMM Faculty Search Committee	2012/13-2013/14
AMM Faculty Peer Reviewer	2014/15
College of Agriculture, College Strategic Planning Sub-Committee	2010/11
College of Agriculture Strategic Planning Sub-Committee Co-Chair	2011/12
College of Agriculture, College Leadership Committee, member	2010/11-2014/15
University, AAPEC Committee, member	2010/11
University, AAPEC Committee, Co-Chair	2011/12-2014/15
University Senator	2010/11, 2011/12
University, Faculty Affairs Committee, Member	2010/11
University, Teacher Scholar Task Force, sub-committee member	2010/11
University, Senate Academic Affairs Committee, Chair	2011/12
University, Senate Executive Committee (vice chair)	2012/13
University Chairs Council (member)	2012/13
University Faculty Senate Vice Chair	2013/14
University Academic Senate	2014/15
<b><i>Alejandra Parise</i></b>	
AMM Faculty Liaison for the Fashion Society student club	2010/11
AMM Apparel News & Focus Days: Department's Annual Recruitment event	2010/11- 2011/12
University, Faculty liaison for the Fashion Society	2010/11-2011/12
<b><i>Cindy Regan</i></b>	
AMM Academic Advisor	2008/09-2012/13

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AMM Management Committee, member	2008/09-2012/13
AMM Faculty search committee, chair	2010/11, 2012/13, 2013/14
AMM Apparel News & Focus Days: Department's Annual Recruitment event	2009/10-2011/12
AMM Community College Symposium: Hosted a recruitment booth for AMM	2010/11
AMM Curriculum Committee Member	2008/09-2014/15
AMM Research and apparel product development sub-committee Chair	2013/14
AMM Scholarship selection committee Member	2013/14
AMM Facility and Equipment Member	2013/14
AMM Student Learning Outcomes Member	2013/14
AMM Fashion Society Advisor	2012/13-2013/14
AMM Department RTP Committee	2011/2012
College of Agriculture, College curriculum committee, member	2010/11-2012/13
College of Agriculture, Member College Assessment Committee	2011/12-2012/13
College Elearning Liason	2013/14
University, Faculty liaison for the AMMA student society	2010/11-2011/12
University Faculty Grievance Committee Member Chair of faculty hearing for a faculty grievance	2012/13-2013/14
University Retention, Tenure and Promotion Committee Member	2012/13-2014/15
Faculty Committee	2009/10 – 2013/14
Masters and Certificate Programs Committee	2012/13
<b><i>Muditha Senanayake</i></b>	
AMM Academic Advisor	2008/09- 2013/14
AMM Management Committee, member	2008/09- 2013/14
AMM AAFA five year program review committee, chair	2010/11
AMM B.S. Curriculum Committee, chair	2010/11-2014/15
AMM Search Committee, member	2008/09- 2013/14
AMM Organizing Optitex 2D and 3D CAD software training for faculty	2010/11
AMM Apparel News & Focus Days: Department's Annual Recruitment event	2008/09- 2013/14
AMM Chair review committee	2011/12-2012/13
AMM Masters program development committee	2011/12-2012/13
AMM Assessment committee	2011/12-2012/13
AMM Instructional innovation committee	2011/12
AMM Dept. Representative and Committee Member – HRLC Committee of the AAFA	2011/12-2014/15
AMM Faculty Committee	2012/13
AMM Faculty Search committee	2012/13-2014/15
AMM Organizer/Coordinator – YMA FSF scholarship	2012/13-2013/14
AMM RTP Committee Member	2013/14-2014/15
AMM Faculty Peer Reviewer	2013/14-2014/15
College of Agriculture, College of Ag. Staff of the year award selection committee, member	2010/11
College of Agriculture, College of Ag. SLO Assessment committee, member	2010/11

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College of Agriculture, Proposal Review committee for Provenzano Professional Faculty, member	2010/11
College of Agriculture, Member – 75 year anniversary committee	2011/12- 2012/13
College of Agriculture, Member - Faculty advisor of the year committee	2011/12-2013/14
College of Agriculture Graduate and Undergraduate Student of the Year Selection Committee	2013/14
University, IT Governance – Class Room Technology Working Group, member	2010/11, 2012/13, 2013/14
University, Election and Procedures Committee and Technology Committee, member	2010/11
University, Academic Affairs committee, member	2010/11
University, AVP Review Committee for Dr. Donald F. Hoyt, Associate Vice President for Research, member.	2010/11
University, Senate Faculty Affairs committee	2011/12
<b>Linda Tucker</b>	
AMM “Chief Operating Officer” for the Apparelsapes retail micro business	2010/11-2011/12
AMM Apparel News & Focus Days: Department’s Annual Recruitment event	2010/11, 2011/12

Table 4.1.5 AMM Faculty Service to the Profession

<b><i>Jiangning Che</i></b>	
American Association of Textile Chemists and Colorists (AATCC) Senior Member	2013/14-2014/15
RA36 - Color Measurement Research Committee in AATCC Voted Member	2014/15
<b><i>Chitra Dabas</i></b>	
Academy of International Business Conference, Vancouver, Canada	2014/15
<b><i>Hyunjoo Im</i></b>	
Web Liaison committee, member, ITAA	2010/11
Conference abstract reviewer, ITAA	2010/11
Journal of Research in Interactive Marketing, ad-hoc reviewer	2010/11
The Service Industries Journal, ad-hoc reviewer	2010/11
<b><i>Peter Kilduff</i></b>	
Journal of the Textile Institute, Editorial Board Member/Reviewer	2008/09-2013/14
Texas Tech University, external reviewer for an RTP case.	2010/11

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Ad hoc reviewer, International Journal of Productivity and Performance Management.	2010/11-2014/15
California Community Colleges Fashion Symposium Planning Committee, member	2010/11
GlobalTex International Trade Show, Los Angeles, September 2010, Panel member on “Issues facing the California apparel industry”.	2010/11
“Developing Funded Research: Lessons from my Voyage of Discovery”. One-day seminar for the faculty and graduate students of the Department of Apparel Merchandising Design and Textiles, Washington State University Pullman	2011/12
Advisory Board Member, Mt. SAC Fashion Dept.	2012/13
<b><i>Cindy Regan</i></b>	
Committee Member, American Apparel & Footwear Association Human Resource Leadership Council.	2008/09
Clothing and Textiles Research Journal: Associate Editor, Design and Aesthetics	2010/11-2014/15
Latina Fashionista Board member	2012/13- 2013/14
<b><i>Muditha Senanayake</i></b>	
Human Resource Leadership Council (HRLC) of the American Apparel and Footwear Association (AAFA), member.	2008/09- 2013/14
Committee Member of the International Program Development Committee of ITAA	2010/11-2014/15
Ad hoc reviewer, Clothing Textile Research Journal	2010/11-2012/13
Workshop on “ <i>Developing the Global Executive: Challenges and Opportunities in a Changing World</i> ” for an audience of corporate executives at the Excel World, Colombo, Sri Lanka. Aug 21,2010	2010/11
ITAA international relations committee	2011/12-2014/15
Member of the Keynote Panel. (2012, October 11). Apparel Made for You (AM4U)-Purchase Activated customized apparel production project. AAFA-HRLC Fall Conference, Cal Poly, Pomona	2012/13
Reviewed manuscripts for ITAA conference proceedings	2012/13-2014/15
<b><i>Linda Tucker</i></b>	
Board member, Fashion Group International Los Angeles.	2008/09, 2010/11, 2011/12

**4.1.e Department Involvement in Civic Engagement and Community Outreach**

During the review period the following civic engagement and community outreach activities were conducted.

- Presentations at community colleges and local high schools as a way of providing information about the apparel industry, its careers and the AMM program.

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- Faculty served on advisory boards of Mount Sac, Long Beach City College, and Santa Ana College.
- In 2010/11 we reached out to create a consortium of companies to collaborate on integrating digital technologies to demonstrate a new model in demand manufacturing project named AM4U (Apparel Made for You). This was demonstrated during the department open house in 2012 which led to building a mini factory locally.

However, our external engagement is severely constrained by the staffing level of the department despite the high internal service demands where currently 6 tenure-track faculty members and one full time lecturer serving about 450 majors. Los Angeles apparel industry is very important to the department of AMM and our engagement with the companies needs to be increased.

### **4.1.f Department Involvement in Service Functions for Other Programs**

During the review period, AMM department provided three GE courses as discussed earlier. In addition, the department initiated a novel concept with new course named “The Focus on the Future (AG 200)” that was designed to run in parallel with the degree. It involved regular student meetings as part of a one or two unit course that can be used as a restricted elective within the program. This program was designed to help participants in developing key business skills to help them fully prepared for professional career upon graduation. Through a series of seminars and other special events on campus the participants were able to hone their critical thinking and communication skills. Students received mentoring by faculty and industry executives assisting in academic and professional development. Students are sponsored to attend professional meetings in their field, where they can learn about the latest developments and develop networks with executives. Through site visits and classroom speakers students were able to explore career pathways and receive special supports helping to secure their first career opening upon graduation. Students in the program also had access to special library and multimedia facilities supporting their studies. On completion of the program, students received a framed certificate of completion. This program was a valuable addition to student resumes and provided an important element in their e-Portfolios that they can share with prospective employers as they seek internships and those vital first career openings.

## **4.2 Student Success**

### **4.2.a Academic Advisement**

Academic advising is a one of the key responsibilities of full time faculty in the AMM department. The department has a balanced mixture of freshmen and transfer students from four-year institutions. During the review period, there was no central advising structure for students – instead the entire burden falls onto the department’s tenure-track faculty. As the number of students in the department grew from 252 in Fall 2008 to 361 in Fall 13 and the number of full time faculty resident in the department increased from 4 to 5 over the same period, the advising load per full time faculty member (including the department chair) increased from 63 to 72 over the period (excluding Fashion Merchandising minors who also require advising).

AMM faculty allocates a significant amount of time in providing one-on-one advising to support students who have diverse backgrounds and different needs. As shown in the Table 4.2.1 below, the department conducted student surveys to understand the advising perceptions among



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students so the results of survey can be used to take an appropriate action and improve the advising effectiveness. During the review period the following advising arrangements were in place. All incoming freshmen and transfer students attended orientation prior to the start of the quarter. Besides the general orientation to the campus, incoming students were provided an orientation to the college by the Dean’s office and then an orientation to their department and program by the department chair.

For continuing students, the department required them to meet with their advisor at least once per year by placing a mandatory advising hold on their accounts for Winter Quarter registration during the Fall quarter. However, students were actively encouraged to meet with their advisors every quarter during special advising weeks prior to the registration period.

As discussed above, the advising load of AMM faculty is extremely high at generally around 70 students for each faculty member. To alleviate the advising load, Advising Cafés were held twice during the academic year to expedite advising in a timely manner for students and to reduce fragmentation of faculty time. The Café’s attracted a high turnout, with all AMM faculty being available. Students and faculty responded positively to the Advising Café and the department continued to offer it starting from 2009/10 academic year.

These advising cafes were advertised in the department beforehand. During the summer quarter, the department chair has acted as an advisor to all AMM students for Fall quarter registration. The AMM Chair also served a special advisor to the students in academic difficulty (GPA. <2.20).

To support advising, the department’s Blackboard site provided self-help resources for all AMM students. This contains need to know information about advising from how to locate assigned advisor, how to use university online advising resources such as the degree progress report, the expected four year schedule of course offerings, and pre-requisite trails. The Department Chair communicates to students via email and shares deadlines and other important information . The department also holds special advising events, especially for seniors, to guide students through university requirements such as graduate writing test, grad check and similar requirements.

Department conducted number of student surveys during the review period to understand advising related needs. The responses are shown below in Table 4.2.1.

Table 4.2.1 Student Surveys on Advising for Years 2011, 2013 and 2014.

Year	Questions / Responses						
2011	<b>Do you know who your designated advisor is in the AMM department?</b>						
	Yes				No		
	100%				0%		
	<b>How many times have you met with an AMM advisor this academic year?</b>						
	Not at all		Once		Twice		Three times +
0%		67%		50%		0%	
<b>My advisor is able to answer my questions.</b>							
Strongly Agree		Agree		Neither		Disagree	
16%		67%		16%		0%	
<b>My advisor assists me in making course selections, if requested.</b>							
Strongly Agree		Agree		Neither		Disagree	
33%		33%		0%		0%	
<b>My advisor assists me in developing strategies for improving academic performance.</b>							
Strongly Agree		Agree		Neither		Disagree	

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	0%	50%	16%	16%	0%	16%	0%
2013 (N=25)	<b>My advisor assists me in resolving problems.</b>						
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
	36%	32%	8%	8%	16%	16%	0%
	<b>My advisor is able to answer my questions.</b>						
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
	24%	36%	16%	16%	4%	0%	4%
	<b>My advisor is available during their office hours.</b>						
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
	16%	44%	24%	8%	4%	4%	0%
	<b>My status in the program in 2012/13 is:</b>						
Freshman	Sophomore		Junior	Senior	No Answer		
8%	16%		36%	40%	0%		
<b>Overall, my experience with the advising support provided to me in the AMM department has been a good one.</b>							
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer	
24%	36%	24%	4%	12%	0%	0%	
<b>My advisor assists me in developing strategies for improving academic performance.</b>							
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer	
16%	28%	28%	8%	12%	8%	0%	
<b>My advisor assists me in making course selections, if requested.</b>							
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer	
32%	32%	20%	4%	4%	8%	0%	
<b>My advisor provides insight into career opportunities, if requested.</b>							
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer	
12%	24%	28%	16%	4%	16%	0%	
<b>Do you know who your designated advisor is in the AMM department?</b>							
	Yes	No		No Answer			
	96%	4%		0%			
<b>How many times have you met with an AMM advisor this academic year?</b>							
	Not at all	Once	Twice	Three times +			
	0%	24%	24%	52%			
2014 (N=19)	<b>My advisor assists me in resolving problems.</b>						
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
	37%	37%	16%	0%	5%	5%	0%
	<b>My advisor is able to answer my questions.</b>						
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer	
42%	26%	16%	5%	5%	5%	0%	
<b>My advisor is available during their office hours.</b>							
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer	
21%	37%	21%	11%	0%	11%	0%	
<b>My status in the program in 2013/14 is:</b>							
Freshman	Sophomore		Junior	Senior	No Answer		
5%	11%		37%	47%	0%		

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<b>Overall, my experience with the advising support provided to me in the AMM department has been a good one.</b>						
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
32%	32%	16%	16%	0%	5%	0%
<b>My advisor assists me in developing strategies for improving academic performance.</b>						
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
21%	32%	21%	16%	11%	0%	0%
<b>My advisor assists me in making course selections, if requested.</b>						
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
47%	16%	21%	0%	5%	11%	0%
<b>My advisor provides insight into career opportunities, if requested.</b>						
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	No Answer
21%	37%	5%	11%	11%	16%	0%
<b>Do you know who your designated advisor is in the AMM department?</b>						
Yes		No		No Answer		
100%		0%		0%		
<b>How many times have you met with an AMM advisor this academic year?</b>						
Not at all		Once	Twice		Three times +	
5%		26%	26%		42%	

Faculty Awards for Advising:

During the review period, in 2011, Dr. Muditha Senanayake was awarded the Mack H. Kennington College of Agriculture Advisor of the Year and honored at the commencement and at a special function organized by the president’s office.

**4.2.b The Learning Environment**

The AMM department had an active calendar of events during the review period. These brought together students and faculty to support student learning, program development, and community involvement. Regular and special events held during the period are indicated in Table 4.2.2.

Table 4.2.2: Special Department Events

<b><i>Fall Quarter</i></b>	
• Counselor Day	Visit of local high school and community college careers counselors. Presentations by faculty and students.
• Pumpkin Festival	College weekend Fall festival event. AMM students, student clubs (AMMA and Fashion Society) and faculty organize and staff a booth for fun and fund raising.
• Advisory Board meeting	Meeting at a member’s premises in the LA area to discuss program development.
<b><i>Winter Quarter</i></b>	
• News and Focus Days	Annual open house event for the AMM department. AMM students and faculty put on a co-ordinated

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	program throughout the department that showcases the industry and the AMM program for feeder colleges, school parties, prospective students and their parents.
<ul style="list-style-type: none"> <li>MAGIC Show, Las Vegas</li> </ul>	Student club members and certain classes visit the world's largest apparel trade show to get hands-on experience of shopping the market. AMM 471 class students visit this trade show as buyers to source apparel and accessories to be sold in the student run boutique; Apparel Scapes.
<i>Spring Quarter</i>	
<ul style="list-style-type: none"> <li>Spring Advisory Board meeting</li> </ul>	Meeting of the advisory board in the AMM department. Members interact with students during a mixer luncheon after the board meeting. Students are also recognized with student awards during this function. Students who followed and excel in ERP software training as a part of AMM 481: Advanced Production Class get their certificates from AIMS360 company during this meeting. AMM alumni also attend this event.
<ul style="list-style-type: none"> <li>Graduation Banquet</li> </ul>	Annual end of year dinner for AMM students. Scholarship winners are presented with their awards and new officers for the AMMA and Fashion Society student clubs are introduced. AMM alumni attend this event.
<ul style="list-style-type: none"> <li>Commencement Reception</li> </ul>	Reception for graduates and their parent prior to the commencement ceremony. Scholarship winners are represented with their awards in the presence of their parents.
<ul style="list-style-type: none"> <li>Field Trip (AMM 445)</li> </ul>	Each spring field trips alternate between the major cultural and fashion centers of New York and Europe (London, Paris, Milan, Rome and Florence). Students visit museums, leading companies, major shopping locations and historical sights.

London Study Abroad program:

Each spring AMM department sends a group of juniors and seniors to London. Students live and study in central London for classroom learning while taking an internship in the London fashion industry. In class, students take courses including Fast Fashion Retailing and Apparel Marketing Research. During their internship experience, students work on a live project with a London-based fashion retailer. For three days a week students intern at a variety of fashion/ retail companies and for the remaining days in London students get time to explore Europe.

Student Clubs:

Currently AMM department has three student clubs including AATCC that just started after this review period in 2014/15.

AMMA (Apparel Merchandising and Management Association) is the oldest student club that assist in organizing the AMM year-end banquet. In addition the club conducts various events in the department during the U-Hour such as industry speakers, fund raising projects, events such as printing t-shirts and Beauty and Make-Up. They also participate in the Pumpkin Festival by organizing a booth.

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Fashion Society is another club initiated by AMM but has office bearers from other departments in in the university as well. The major event that this club organizes is the annual fashion show in the university generally in the Winter quarter. Students who present at the show as fashion designers showcase their product line during the show. Visitors from the industry also are invited for the event with tickets issued at a nominal rate.

AATCC is the latest addition to the AMM student clubs and it is the student chapter for the professional body; American Association of Textile Chemists and Colorists.

A faculty liaison is allocated every year for each of these student clubs. These clubs runs an election every year to elect its officers who are recognized during the year-end banquet event.

### **4.2.c First Year Experience Program**

All AMM students must be acquainted with college of Agriculture program opportunities, required academic skills and proficiencies, and knowledge of academic support entities, which are necessary for a successful college career. All new students entering AMM must demonstrate these abilities by either completing AG 100 or by having completed 36 quarter units, prior to admission, of college level course work from an accredited college or university. New students entering the AMM with less than 36 units completed must enroll in AG 100 within three quarters of college residency. Entering freshmen should take AG 100 their first quarter. This course is part of the First Year Experience in the College of Agriculture.

Considering the review period the following one-year persistence rate for the department shows that it is well above the university average (Table 4.2.3). This is the percent of first time freshman enrolled in one year later.

Table 4.2.3 One-year Persistence Rate

Year	AMM Dept.%	University%
08/09	74.3	66.7
09/10	88.9	71.1
10/11	87	74.5
11/12	79.6	73
12/13	81.6	73.4

### **4.2.d Student Commitment, Motivation and Satisfaction**

The department conducted a formal assessment survey of seniors in 2008/09, based on a new survey instrument developed in 2007/08, initially focusing on the core courses. This survey and its results were discussed in the previous five-year review document and will not be discussed here. However, this type of a survey could not be conducted after 2008/09 academic year. The results of this last survey responses indicated that students are confident about product development and merchandising aspects of the program, including market research, trend forecasting, costing, and aesthetics. They were less confident about product and process technologies, notably textile structures and finishes and technical aspects of garment design and performance, and about international trade issues, including legal compliance. These findings fit with faculty perceptions during the review period regarding student motivation in the classroom, which was highest for product development, merchandising and promotion classes and lowest for classes introducing technical aspects of products, processes and business. Faculty took these responses into consideration and appropriate curriculum changes were done such as strengthening the textile subject knowledge during the review period.

### **4.2.e Co-curricular Learning Experiences relevant to the Program Goals**

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Internships:

As per the AMM curriculum, students must enroll for AMM 442, which is a mandatory internship course where they spend 120 hours during a given quarter. A pre-internship class; AMM 341, must be taken before they can enroll for the mandatory internship that will prepare them for the internship experience. Students will complete an e-portfolio, which is started at the AMM 341 class as a partial requirement for the internship class with their experience and learning.

Study abroad:

Every Spring quarter, a group of students get an opportunity to study in London as explained in the above section 4.2.b. Courses, visits to companies, visits to museums, and internships are organized in correspondence with the curriculum so that students can complete a full quarter units in London.

Research experiences:

During the review period faculty made great emphasis on student research that lead to the introduction of two new courses AMM 461: Senior Project 1 and AMM 462: Senior Project 2. Both were introduced as a 2-unit course. In AMM461, students learned scientific research methods and implement the learning into conducting a research project in AMM 462. Students were encouraged to participate and present their research in the university undergraduate research conference or other venues such as Southern California Conference on Undergraduate Research (SCCUR). In addition to formal research classes faculty were encouraged to promote undergraduate research with the newly introduced teacher-scholar model at CPP. Table 4.2.4 below provides a list of research projects conducted and presented by the students at the conference venues under the guidelines of the faculty at AMM department.

Table 4.2.4 Undergraduate Research

Year	Student	Mentor	Title	Venue
2008/09	Juwano, Inanta	Senanayake, Muditha	The Future of Fashion through Mass Customization: Practices in the US Market.	SCCUR, CSU Pomona, CA
2009/10	Argueta, C (Ronald E. McNair Scholar)	Kilduff, P.	The Evolution of National Textile Industries: The Influence of Factor Endowments	SCCUR, Pepperdine University, Malibu
	Vang, M. (Ronald E. McNair Scholar)	Senanayake, Muditha	Consumer barriers to the acceptance of apparel mass customization	SCCUR, Pepperdine University, Malibu
2010/11	Crocker, Kate.	Senanayake, Muditha	Evaluation of Women's Wear to Understand Consumer Preferences for Vanity Sizing	SCCUR, CSU Dominguez Hills, Carson
	Gianessi, Patricia	Senanayake, Muditha	Analysis of Virtual vs. Real Garment Fitting and Visualization using Advanced Technologies	SCCUR, CSU Dominguez Hills, Carson
2011/12	Munguia,	Senanayake,	Fit Customization for Apparel:	SCCUR, CSU,

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	Natalie	Muditha	The Use of Foot Scanning as a Method of Enhancing Consumer's Purchasing Decision	Channel islands, Camarillo
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### Certificates for Technical Skills:

As part of AMM 481: Advanced Apparel Production class taken by AMM production students in the International Apparel Management track, students are given the opportunity to obtain a Certificate of Proficiency in using a production management software system widely used in the industry (AIMS360). The certificates were awarded by the company's President to the students who obtained a score of 85% or higher in learning the system. This opportunity increases student motivations learning and using IT system in manufacturing and also satisfies the student learning objectives of the course.

### **4.2.f AMM Graduates**

AMM alumni have positions in a diversity of companies including; general retail chains such as Target, Nordstrom, Macy's, and Kohl's, specialist retailers such as retail chains such as Ross, Forever 21, Pacsun, Hot Topic, MetroPark and BabysRUs, and brand houses such as Quiksilver, American Apparel, St John Knits, Kellwood West, Guess, BCBG and Karen Kane; entertainment corporations such as Disney; a multitude of small and medium sized manufacturers, wholesalers and importers; and related companies such as market research agencies, media companies and technology suppliers.

Faculty resource limitations have prevented AMM from implementing a formal alumni-tracking system. A graduate survey was utilized for a number of years but responses were so low that the results provided little value. Instead, the department has initiated tracking of the AMM graduates using a professional social media site, LinkedIn. Students, specifically seniors, are encouraged to create a profile on LinkedIn and keep in contact with the department upon graduation. The Department Chair accesses their information and analyzes their destinations upon graduation and corresponds with periodic emails. There is no database to identify where all AMM alumni are but the department surveys alumni class years via LinkedIn to build a picture of recent graduates and progress being made by graduates. This information on alumni has been posted on the AMM website at: <https://www.cpp.edu/~agri/apparel-merchandising-and-management/alumni/index.shtml> The AMM 2015 survey was taken soon after graduation to evaluate placement rates. It indicated that very few graduates were unemployed and that an estimated 80%+ were in 'graduate-type' career positions rather than jobs that did not require a degree. A survey of 2016 alums was completed shortly before preparation of this report. From the survey only approximately 50% of all graduates could be confirmed in career positions. However, the data is not complete, since it would appear many alumni from the class of 2016 have not updated their LinkedIn profiles. Nevertheless, it suggests that career placement rates had dropped significantly. This is likely a result of the current recessionary conditions being experienced in the US fashion retailing sector, dubbed the retail apocalypse. The plan is to conduct an email follow-up with 2016 alums to clean-up the data.

### **4.2.g Alumni Opinions**

Alumni have been supportive of the department – they have attended events such as the annual banquets and open house; they contact us frequently with internship and career opportunities; they serve on our industry advisory board; and visit as classroom speakers including

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Professor for a Day. A survey of alumni in 2008/09 regarding the need for a master degree in Apparel Merchandising and Management drew only a modest response, however, respondents overwhelmingly supported it.

A few days before this report was completed the following email was received from an alumna at a major speciality retail chain:

*Hi Dr. Kilduff,*

*Just wanted to let you know that out of the candidates we have interviewed, the team is the most impressed with the Cal Poly [AMM] students on their interview skills and professionalism!*

*We haven't made the final decision yet but based on responses from my coworkers, I'm pretty confident both positions will go to Cal Poly students*

*All the best,*

The department also receives a stream of 'casual' empirical evidence reflecting on program quality. Virtually all internship sites for AMM students provide strongly positive feedback and indicate they are keen to receive more interns from the department. A number of key industry figures, including some on the AMM advisory board have stated that AMM interns and graduates are the best available.

### **Summary**

The instructional assessment scores for the AMM program during the review period average less than 1.93 as expected by the college target of 2.0. This is with a scale of 1 being very good and 5 being very poor. The department has maintained mean average score range from 1.70-1.93. Marginally weak areas for improvement (with average score from 2-2.28) are student assessments in areas such as effectiveness of instructor's answers, completeness of instructions for assignments, labs and activities, and the clear and completeness of the grading criteria. Overall, student instructional assessment results show teaching and learning effectiveness across all quarters during the review period. In addition to nominating faculty for the Teacher of the year award for the college, the department has conducted student surveys to identify a faculty member to award the department Teacher of the year award every year. In addition, the faculty underwent training and obtained certification for industry software programs, which were used to train students enhancing the program quality of AMM.

With the addition of tenure track faculty to the department, it is evident that the scholarship performance of the department improved considerably during the review period. The faculty has been very productive in seeking internal competitive grants such as RSCA in addition to number of external grants such as the USDA HSI grant for \$289,000, to name a few, during the review period. Faculty also received awards and honors from professional organizations for their scholarship activities. Faculty promoted and mentored number of undergraduate research projects leading to publications and presentations in undergraduate research conferences including mentoring two McNair scholars. These efforts were established in line with the university initiations such as the Teacher Scholar model.

The small group of faculty in the department participated in almost every department committee to take ownership of the service functions. In addition every faculty member participated in either college of university or both in committee work. Despite our external engagement was severely constrained by the staffing level, the faculty participated in few community outreach activities. Developing a consortium of companies to collaborate on integrating digital technologies to demonstrate a new model in demand manufacturing project named AM4U (Apparel Made for You) is an example. As Los Angeles apparel industry is very important to the department of AMM, our engagement with the companies needs to be increased.



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Academic advising is a one of the key responsibilities of the tenure track faculty in the AMM department. Each faculty member advised about 70 students. Several strategies were implemented during the review period such as advising cafes, Blackboard advising resources and new advising documents to make the advising manageable, effective and productive.

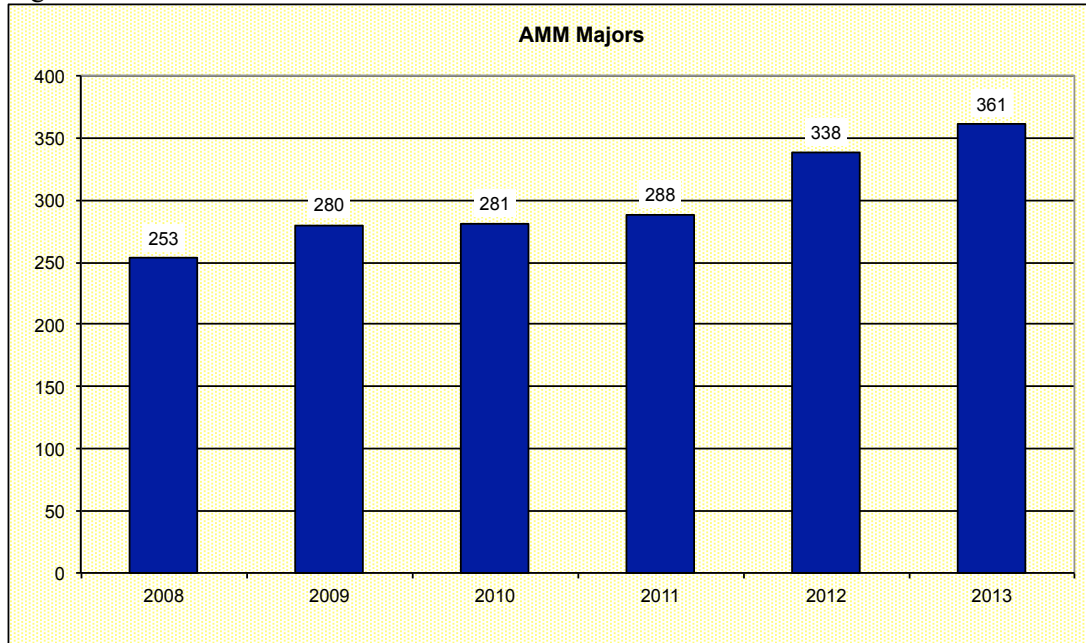
The department conducted a formal survey of seniors to identify their confidence in core subject areas and as a result decisions were made for curriculum revisions. The students were also engaged with their student clubs and during the review period new student club was initiated as a west coast student chapter for the AATCC professional organization. AMM Students also got the opportunity to participate in London study abroad program, which was better structured during this review period clearly defining the units to cover a full quarter in London. The Alumni of the AMM program have been supportive and have participated in departmental events. The department also receives a stream of ‘casual’ empirical evidence reflecting on program quality. Many internship sites offer graduate positions and indicate they are keen to receive more interns from the department. A number of key industry figures, including some on the AMM advisory board have stated that AMM interns and graduates are the best available.

## 5. RESOURCES

### 5.a. Enrollment

Enrollment in the AMM program has grown consistently over the review period from 253 majors in 2008/09 to 361 in 2013/14 (Figure 5.1). This growth has reflected both the prosperity of the apparel production and fashion retail sectors in southern California during this time, and growing awareness of the AMM program in high schools and community colleges. The data which were analyzed for the below section were received from the office of IRAP.

Figure 5.1 AMM Enrollment Growth 2008/09 – 2013/14



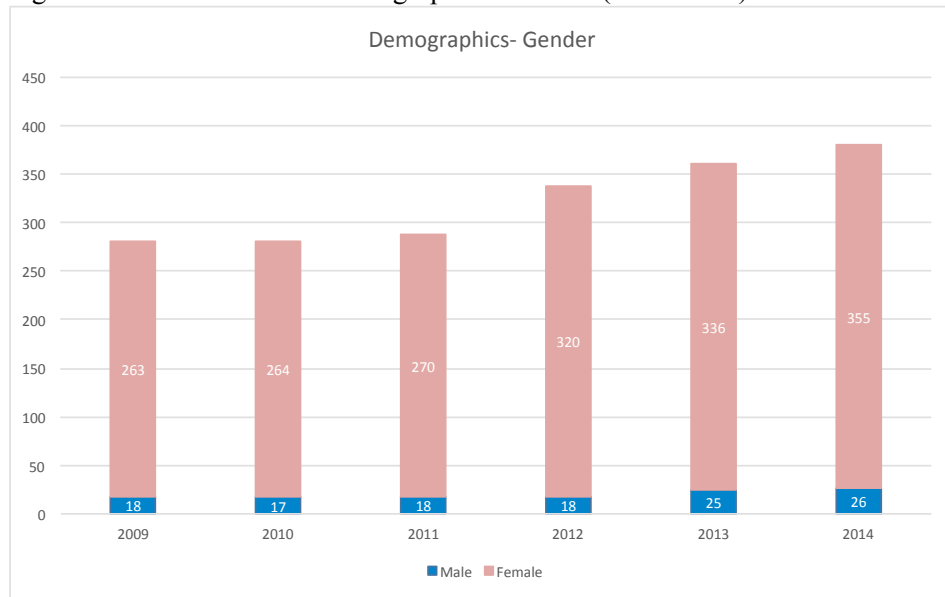
With regard to demographics of the student body, the department has a highly diversified group in terms of ethnicity but exhibits a strong gender imbalance, with few males in the program that was continued from the previous review period as shown in Figure 5.2. Although the number of males in the program has expanded over the review period, they remained only 7% of the student body in 2013. The department has been active in promoting AMM as a business and technology program for careers in international business. The department’s website and promotional materials have been developed to gender neutral. Nevertheless, many careers counselors and school and college teachers promote careers in fashion in ways that continue to appeal more to young women rather than young men.

Foreign students, mostly from Asia, and not all non-resident aliens, form a small but significant component of the AMM program (Table 5.1).

Table 5.1: AMM Student Demographics 2009 - 2014

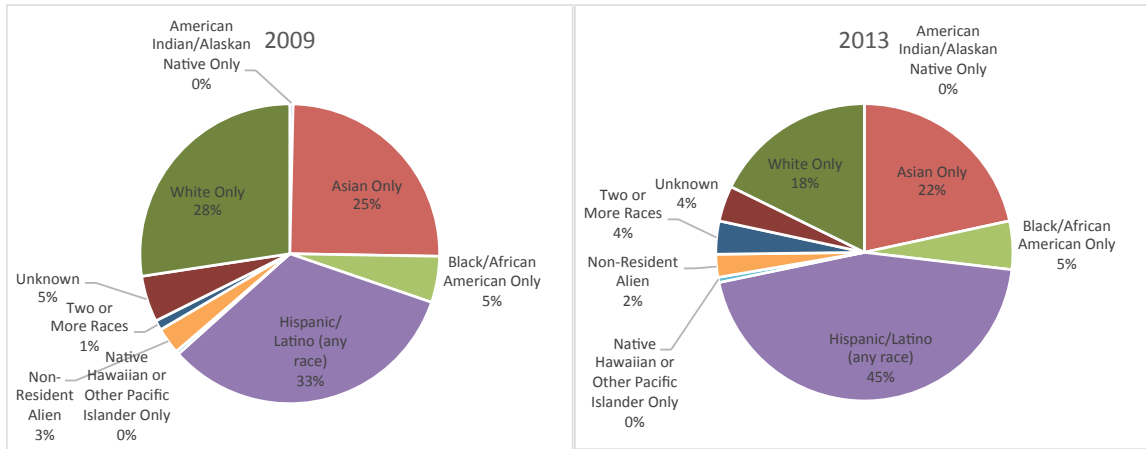
	2009	2010	2011	2012	2013	2014
Male	18	17	18	18	25	26
Female	263	264	270	320	336	355
American Indian/Alaskan Native Only	1	1	1	1	0	0
Asian Only	70	64	59	68	78	77
Black/African American Only	14	12	14	14	19	23
Hispanic/Latino (any race)	93	96	110	142	162	174
Native Hawaiian or Other Pacific Islander Only	1	1	0	3	2	0
Non-Resident Alien	8	9	7	7	9	15
Two or More Races	3	10	15	14	13	15
Unknown	14	17	16	17	14	15
White Only	77	71	66	72	64	62
	281	281	288	338	361	381

Figure 5.2: AMM Student Demographics: Gender (2009-2014)



With regard to ethnicity, the AMM program exhibits an approximate balance between white, Asian and Hispanic students at the beginning of the review period. However, it is apparent that the Hispanic student population has been consistently increased as shown in Table 5.1 and Figure 5.3. While black students form only a small fraction of those in the program, their proportion continued to be the same. While the proportions of white and Asian students have not changed significantly, the numbers have slightly reduced in 2013 compared to 2009.

Figure 5.3: Shifts in AMM Student Ethnicity 2009-2013



The gender imbalance in the AMM program continued to be greater than that for the College of Agriculture and contrasts starkly with the gender split for the university as a whole (Table 5.2).

Table 5.2: Comparison of the AMM Student Gender Split with those for the College and University in Fall 2009 and 2013

	Percent Male		Percent Female	
	2009	2013	2009	2013
AMM	6	7	94	93
Ag College	17	20	83	80
Cal Poly Pomona	57	57	43	43

Table 5.3: Comparison of AMM Student Ethnography (%) with those for the College and the University in Fall 2010 and 2013.

	Fall 2010			Fall 2013		
	AMM	AG	CPP	AMM	AG	CPP
American Indian/Alaskan Native Only	0	1	0	0	0	0
Asian Only	23	16	26	22	19	25
Black/African American Only	4	4	3	5	3	3
Hispanic/Latino (any race)	34	33	33	45	40	37
Native Hawaiian or Other Pacific Islander Only	0	0	0	1	0	0
Non-Resident Alien	3	3	5	2	3	4
Two or More Races	4	3	2	4	4	4
Unknown	6	6	6	4	4	5
White Only	25	34	24	18	26	22

The ethnic composition of the AMM program is generally representative of that for the university and a little more diverse in character than that of the College (Table 5.3). In turn, these broadly reflect the ethnic composition of the southern California region. The primary change in AMM student composition has been an apparent increase in the proportion of Hispanic students (45% in 2013 compared with 34% in 2010). From 2010 to 2013, the increase in proportion of Hispanic students is generally apparent in the college and the university.

Retention:

AMM student at risk profile compare favorably with the university except year 2010. However, the total risk profile shows that the department has a significantly high risk percentage

compared to the college in years 2010, 2011 and 2013 (Table 5.4). Overall, the proportion of AMM students at risk showed an increase in 2010 which may be due to the economic condition with recession that not only affected CPP but overall the Southern California region.

Table 5.4: Comparison of AMM with College and University - Percent Undergraduates at Risk

Year	GPA < 2.00			GPA 2.00-2.19			Total		
	AMM	AG	University	AMM	AG	University	AMM	AG	University
2008	6.7	6	6.6	5.7	6.9	9.2	12.4	12.9	15.8
2009	6.9	4.9	5.3	3.7	6	9	10.6	10.9	14.3
2010	7.4	3.4	4	9.1	7.2	8.9	16.5	10.6	12.9
2011	5.8	3.4	4.3	5.8	5.2	7.8	11.6	8.6	12.1
2012	3	2.6	3.2	3.6	4.4	5.6	6.6	7	8.8
2013	7.2	3.4	3.9	4.2	4.8	7.7	11.4	8.2	11.6

One-Year Persistence Rate:

Considering the review period the following one-year persistence rate for the department shows that it is well above the university average and mostly compatible with the college average (Table 5.5). This is the percent of the first-time freshman enrolled in one year later. This was in response to the actions taken such as stronger mentoring and advising freshman students based on the previous review periods data that showed a lower rate compared to the college.

Table 5.5: First-Time Freshmen by Year of Entry Percent Enrolled 1 Year Later

Year	AMM Dept.%	College of Ag%	University%
08/09	74.3	73.4	66.7
09/10	88.9	86	71.1
10/11	87	80.9	74.5
11/12	79.6	81.1	73
12/13	81.6	78.2	73.4
13/14	81.8	83.1	71.2

Graduation rates:

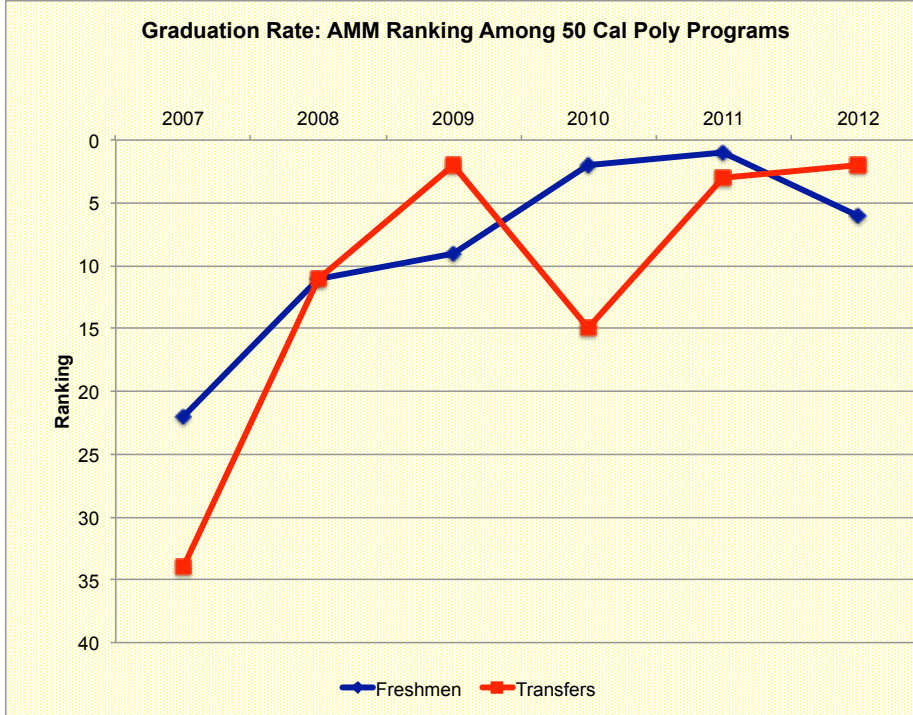
The four-year transfer graduation rates are compatible or better compared to the college. Comparing to the university the AMM the four-year transfer graduation rates are well above the university average (Table 5.5).

Table 5.5: Four Year Graduation Rates - Transfers

<b>FOUR-Year Graduation Rate: New Undergraduate Transfers</b>				
	Fall 2009	Fall 2010	Fall 2011	
<b>AMM Dept.</b>	66.70%	72.40%	75.00%	
<b>Agriculture Average</b>	65.30%	73.20%	67.60%	
<b>University Average</b>	59.70%	65.70%	66.20%	
<b>University Best</b>	83.30%	88.90%	83.30%	

Graduation rate rankings of freshmen and transfer students (Fig 5.4) indicate significant variation at the beginning of the review period to improved graduation rate ranking towards the end of the review period with data from years 2007 to 2012.

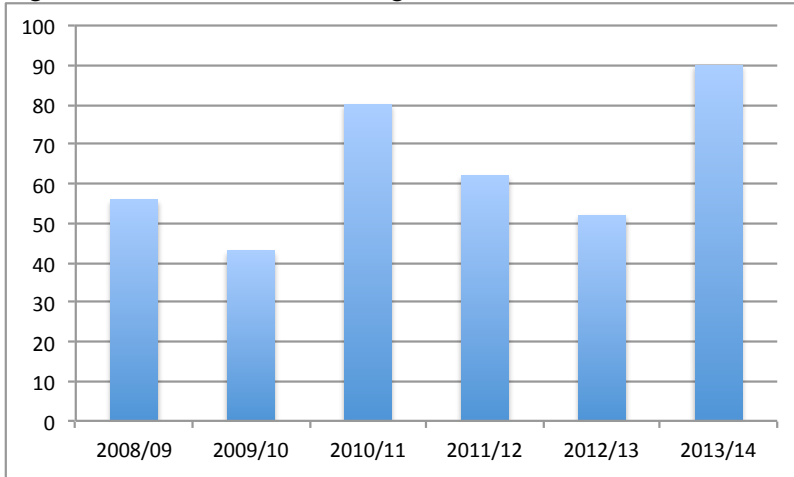
Figure 5.4: AMM Graduation Rate Ranking compared to 50 CPP Programs from 2007 to 2012



Degrees Conferred:

Figure 5.5 indicates that the number of AMM degrees conferred has risen strongly over the review period, broadly in line with enrollment growth.

Figure 5.5: Number of AMM Degrees Conferred 2008/09 – 2013/14



### 5.b. Student Outreach and Recruitment

In Winter quarter the department organize an annual open house event that coincide with the college News and Focus day event. AMM students and faculty put on a co-ordinated program throughout the department that showcases the AMM program for feeder colleges, school parties, prospective students and their parents. The faculty and students plan and organize a day of presentations, student projects, lab tours and question and answer meeting. During the review period this was done as one or two-day event. In addition, student groups from transfer colleges are organized based on demand. The department Chair and the faculty visit local high schools and community colleges and make presentations about the program as an effort to increase the awareness of the AMM program and the apparel industry as a whole. Further the faculty worked as board members of Mount Sac, Long Beach City College, and Santa Ana College, which are feeder colleges and attended their annual board meetings during the review period.

### 5.c. Faculty

#### Faculty Resources:

From 2008/09 through 2010/11 the department had four tenured and tenure track faculty (Dr. Peter Kilduff, Dr. Cindy Regan, Dr. Muditha Senanayake and Dr. Hyunjoo Im) and one full time lecturer (Dr. Linda Tucker). In 2011/12, Dr. Chitra Dabas was hired as a tenure track faculty making the total number of tenure track faculty to five. In 2012/13, Dr. Hyunjoo Im left the department to join her husband at University of Minnesota and the department hired Dr. Jiangning Che in 2013/14 to bring back the number of tenure track faculty to five.

Beyond the review period, the department hired 3 faculty members out of whom we lost two faculty members when Dr. Jianli Hu who was hired in 2014/15 left at then end of 2014/15 and Dr. Regan retired at the end of 2014/15 brining back the total number of tenure track faculty to 6 today serving 408 enrolled majors in 2016.

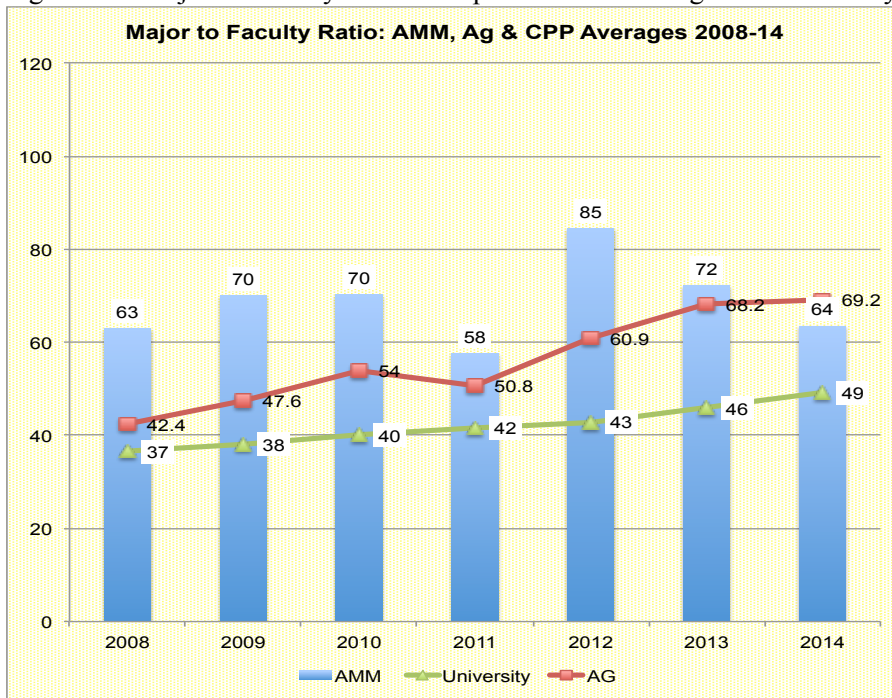
A key objective has been to build the number of tenure track faculty lines to support the development of the program. With the growth of the program from 253 to 361 AMM majors during the review period with one extra tenure track faculty member in 2013/14 compared to 2008/09 was challenging. The department Chair joined the department in 2007 and the only senior professor who has been in the department for more than 10 years was Dr. Cindy Regan. Other than Dr. Regan, the tenure track faculty have a comparatively young age profile and there are no expected retirements over the next five years.

In addition to tenure track faculty, the department has employed part time and full time lecturers. In 2013/14, we had one full time lecturer, Dr. Linda Tucker. The department also maintains a part time faculty pool of individuals to serve 361 students.

#### Major to Faculty Ratio:

Figure 5.6 shows the major to faculty ratio for AMM comparing with the college and university averages. The major to faculty ratio is generally higher than the college averages and much higher than the university averages during the review period.

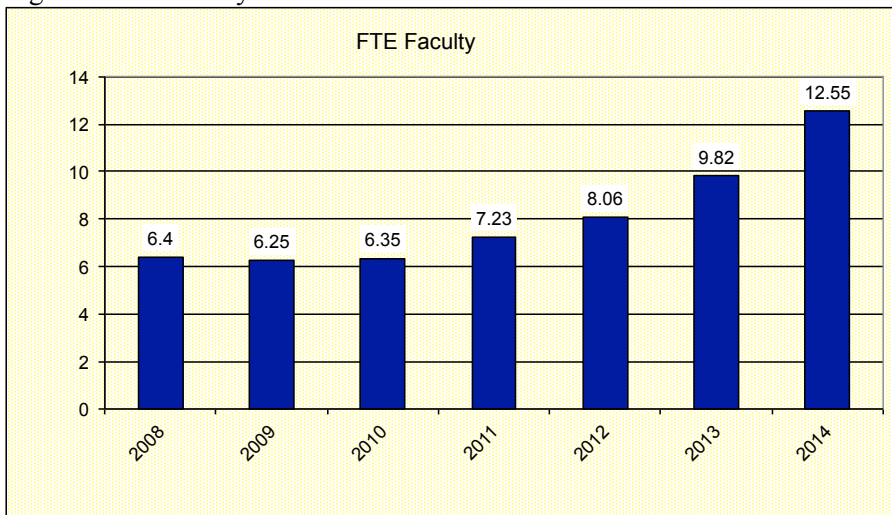
Figure 5.6: Major to Faculty Ratio Comparison with College and University: 2008-2014



FTE Faculty:

Combining full time and part time faculty, the university data in Table 5.7 indicates the increase in AMM’s FTE faculty from 6.4 in 2008 to 9.82 in 2013. The number of full time faculty lines in the department has increased by one with considerable increase in the AMM majors over the review period.

Fig 5.7: FTE Faculty





FTES Taught:

Table 5.6: Percent of FTES Taught by Tenured/Tenure Track and Temp Faculty

	AMM			Ag	Universit y
	FTES Taught	% by T/TT	% by Temp.	% by Temp.	% by Temp.
2008	129.2	44.2	55.8	31.8	44
2009	144.3	46.7	53.3	32.3	40.5
2010	132.7	46.2	53.9	46	52.4
2011	133.8	48.1	51.9	47.5	51.1
2012	159	30.9	69.1	61.9	51.5
2013	211	31.1	68.9	65.6	54.7
2014	223	25.6	74.4	71.5	57.7

Table 5.6 indicates that the FTES taught by temporary faculty at AMM are higher comparing with the college and the university.

Department Staffing:

Table 5.7 indicates the faculty and staff level during the review period.

Table 5.7: Department Staffing

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Tenure Track Faculty	4	4	4	5	4	5
Full Time Lecturers	1	1	1	1	1	1
Part Time Lecturers	7					10
Staff	2	2	2	2	2	2

Faculty/ Staff Gender and Ethnicity:

Between 2008 and 2013 the AMM full time faculty became more gender balanced (Table 5.8). Female faculty (part time and full time) were still in the majority during the review period, as is typical of apparel programs nationwide. During the review period the department added 3 part time faculty members to its part time faculty pool.

Table 5.8: Changes in Faculty/ Staff Gender 2008-2013

	2008/09		2013/14	
	Female	Male	Female	Male
Tenure track	2	2	2	3
FT Lecturers	1	0	1	0
PT Lecturers	5	2	8	2
Staff	1	1	1	1

The AMM program has always relied on part time instructors meet its instructional needs (Table 5.8). The department has access to a very high quality pool of individuals with a variety of

industry backgrounds and strong teaching capabilities. Students have benefited from their professional expertise. There is a constant flow of individuals seeking to join the faculty pool, enabling the department to be selective in its choices.

With regard to ethnicity, the diversity of the department has increased over the period (Table 5.9).

Table 5.9: Changes in Faculty/ Staff Ethnicity 2008 - 2013

	Fall 2007				Fall 2013			
	Faculty		Staff		Faculty		Staff	
	Female	Male	Female	Male	Female	Male	Female	Male
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian/Pacific Islander	1	3	0	1	2	3	0	1
Black, non-Hispanic	1	0	0	0	2	0	0	0
Hispanic	1	0	0	0	2	0	0	0
White, non-Hispanic	4	2	1	0	5	2	1	0

Faculty Training and Specialization:

All tenured and tenure track faculty members with terminal degrees (all from recognized national or international apparel or textile programs) are considered to be experts in their fields. These faculty continued to their scholarly specialization in apparel/textile industry analysis, apparel product development, apparel production, consumer behavior, and textiles as discussed in 4.1.b during the review period (see faculty CV's in Appendix B). In addition faculty received certificates and training in number of industry software systems such as 2D and 3D computer aided design (Tuka CAD, Tuka 3D, and Optitex 3D) and enterprise resource planning (AIMS360) during the review period.

Faculty Resources Summary

Overall, the department has seen its faculty profile strengthen considerably over the review period with two new tenure track hired but losing one. In addition, the non-tenure track faculty resources were also strengthened with the recruitment of some high-quality individuals. Nevertheless, the significant pace of enrolment growth has continued to put a strain on faculty resources, which remain spread too thin to best achieve the instructional, scholarship and service aspirations of the department and of the university. Continued building of the faculty will be critical to attainment of the department's potential as a leading international apparel school.

**5.d. Staff**

During the review period the AMM department had two full time staff personnel: an Administrative Support Co-ordinator (ASC II), Ms. Patty Mutz, and a technician Mr. Antonio Espinas. Both individuals were hired before the review period to replace individuals who left the department. Both individuals have proven to be a good match with the department needs, providing a high level of service to the department. Mr. Espinas's rank was increased from

Equipment Technician II in 2007/08 to Equipment Technician III during this period in reflect his contributions. His primary responsibility is to maintain the industrial and research equipment used in the AMM program. However, specialist repair of equipment often necessitates the hiring of an outside contractor.

For maintaining the computer labs and software systems, the department depends on the college's I&IT specialist.

Part time Student Assistants have been hired as funds have permitted to help faculty and the Administrative Support Co-ordinator with administrative tasks.

### **5.e. Library Resources**

The Cal Poly Pomona library houses the books, journal and other publications needed by the AMM students. There are also computer stations with databases that serve all of the students on campus. Since the specialist needs of AMM faculty and students coincided more closely with those of programs in the College of Business Administration, in 2008, the department switched to Daniel Hanne, who was also the reference librarian for that College. Later in the review period Julie Shen took over as the subject librarian for AMM. The faculty worked very closely with Julie to create number of subject related resource web pages for number of classes. In addition to number of class visits to the library, Julie visited AMM to teach how to use the library web site and databases specifically when the program emphasized undergraduate research.

Table 5.10 : Library Resources

	<b>2008</b>	<b>2016/17</b>
Total annual library budget	5,123,348	3,936,089
Number of hours per week library is open	86.5	91.5
Number of computer workstations	325	279 public space 86 computers in 3 library classrooms Total: 365
Textbooks specific to AMM	1908	2510 (Books + eBooks)
Periodicals specific to AMM	28	11 (Actively Paying)
Budget devoted to AMM	7,234	Books: \$0.00 Periodicals: \$1,110 Serials: \$10,605 Databases: \$5,319 (Berg Fashion Library \$993; WGSN \$4,326) Grand total: \$17,034

The increase in library resources devoted to AMM has been significant. The AMM Department also subscribed to a number of periodicals that are kept in the department's student resource room. These include: California Apparel News, Women's Wear Daily, and Apparel. As noted below, in 2007/08, room 45-201 was reorganized to create an informal departmental library and study area for AMM students based on donated books and periodicals.

### 5.f. Operating Budget

Table 5.11: AMM Department Budget (Data from State Account)

	2009/10	2010/11	2011/12	2012/13	2013/14
Faculty Salaries	344,929	346,670	397,855	354,705	403,269
Part Time Faculty	121,096	141,870	136,426	207,395	305,830
Support Staff Salaries	81,790	89,520	89,520	90,368	97,424
Student Assistants	877	9,648	3,365	2,726	6,740
Travel	598	3,845	4,188	1,748	2,719
Equipment, Supplies & Services*	7,308	89,430	85,963	32,675	20,616
<b>Total</b>	<b>556,598</b>	<b>680,983</b>	<b>717,317</b>	<b>689,618</b>	<b>836,599</b>

\* Includes special funds allocated for remodeling and equipment in 2010/11 and 2011/12

The budget of the AMM Department has grown to reflect program growth over the period (Table 5.11). However, against a background of deep CSU budget cuts in 2009/10 the operating budget has remained insufficient for the needs of a growing program of its kind (Table 5.12).

Table 5.12: AMM Department Operating Budget After Salaries & Utilities

	2009/10	2010/11	2011/12	2012/13	2013/14
Initial allocation	9,350	15,815	15,900	15,900	22,734
Final received*	8,783	102,923	93,516	37,149	30,075

\* Student Assistants, Travel and Equipment, Supplies & Services. Includes special funds allocated for remodeling and equipment in 2010/11 and 2011/12

Operating funds are used for the following purposes: equipment maintenance in the production and testing labs, photocopier rental, office supplies and other consumables, student assistants, industry magazine subscriptions, marketing materials, travel, software and minor equipment upgrades, telephones. Extra monies for capital expenditure and travel were made available most years by the College of Agriculture. In addition, the department has been successful in obtaining donations of equipment, textile consumables, and software. However, maintenance costs are significant and some software systems, lab supplies, and teaching supplies must be purchased.

### 5.g. Space and Facilities

The AMM Department is housed in Building 45 a former Agricultural Engineering Workshop facility located on the edge of the campus, close to the freeways. It shares this building along with the Landscape and Irrigation Science option of the Plant Science department and with the wood model shop of the College of Environmental Design.

The building has provided the department with considerable space for expansion as enrolment has grown. It has also permitted the department to offer most of its courses within building 45, obviating the need for students and faculty to travel across campus to building 2. This has been of significant benefit. However, the poor quality of facilities in building 45 has necessitated significant investment in modernization and refurbishment that has not kept pace with the department's growth.

During the review period, room 45-201, which was a former production facility under the ATRC, was re-designated and developed into a departmental study room and a library. Following the move into the former ATRC facilities, room 45-121 was converted from a faculty office to a retailing laboratory for the fashion retailing capstone course sequence that runs the Apparelsapes micro-business.

With the continued program growth, room 45-102 was converted into a larger classroom that proved to be a better teaching venue and in 2008 it was equipped with smart classroom facilities. Later it was refurbished with adequate environmental control and lighting.

The increasing need for computer lab time in the curriculum also saw the conversion of room 45-102A, an L.I.S. research lab built into 45-102, into a computer classroom which was achieved with 28 computers, overcoming a problem of having to split some lab classes between two (adjacent) rooms 45-125 and 45-126. This gave the department (mostly exclusive) access to three computer labs with 12, 18 and 28 computers respectively, equipped with CAD and other business software resources.

Continued need for more classroom space resulted in the use of 45-259, a conference room, and 45-153, the production lab, as a classroom facility. These were also later converted into smart classroom facilities that assisted in scheduling for greater classroom demand. Table 5.13 summarizes teaching facilities used by AMM in building 45 during the review period.

Table 5.13: Teaching Facilities in Building 45

	Space Type	Approx Seats	Smart Classroom Technology	
			2008/09	2013/14
101	Classroom	24	Yes	Yes
102	Classroom	50	No	Yes
102A	Computer Lab	28	No	Yes
103	Workshop/ Classroom	50	Model shop	Model Shop
120	Classroom/ Testing Lab	24	Yes	Yes
121	Retail Showroom Lab	4	Retail space	Retail space
125	Computer Lab	12	No	No
126	Computer Lab	18	No	No
153	Apparel Production Lab	24	No	No
154	Research Lab	12	No	No
201	Classroom/ Study Room	24	No	No
259	Meeting Room/ Classroom	24	No	Yes

Besides teaching facilities, another critical issue is the availability of student amenities. Various areas in the building have been pressed into temporary service to provide a place for students to relax and have meals breaks. A former janitorial closet was transformed in to a space to satisfy this need. Given the location of the department away from the central campus and the anticipated growth of the program, there is a need to create resources to support students in the building, including private study facilities and a lounge. It was planned that 45-201 and the adjacent mezzanine (the latter currently used for storage) will provide a library/ study and lounge facility for students.

### **5.h. Computing Resources**

As noted above, the department has benefitted from the expansion of computer labs during the review period. They were re-equipped with new computers and software through out the review period.

Use of specialist software systems within the curriculum has steadily expanded to include the programs in classes/labs/activities. The department has three graphic design type CAD systems; Adobe illustrator, Adobe Photoshop and Fashion Designer (formerly Freeborders) that are widely used in the industry. It also had two patternmaking CAD systems Tuka CAD and PAD. Two new

3D CAD programs were added to the program; Tuka3D as an addition to Tuka CAD and Optitex 3D as a new 3D CAD program. As the industry move into more 3D CAD, these additions were paramount important to AMM program which emphasize on teaching advanced technologies which are starting to be used in the southern California garment sector. In addition, during the review period, an ERP software program; AIMS360 was introduced and added as wholesale manufacturing and business software program. Excel is also emphasized since it is used for a number of specialist production and retail applications in the apparel sector.

It is planned that use of specialist software applications will continue to expand. Currently, the department is reviewing various specialist business integration software systems to create a seamless concept to consumer platform that will provide cutting-edge knowledge and support integration of the curriculum.

### **5.i. Scholarships, Brochures, and Website to Support Recruitment and Retention**

During the review period the department awarded the following scholarships every Spring quarter during the Annual Banquet organized by the students. These awards were funded by professional organization - AAFA, Hub endowment, Professor Jean Gipe and Professor Betty Tracy (Founders of AMM) and department funds as available.

- AAFA Outstanding Production Student
- AAFA Most Promising Production Professional Student
- Outstanding Retail Student
- Most Promising Retail Professional
- Outstanding Junior Production Student
- Outstanding Junior Retail Student
- Outstanding Sophomore Student
- Outstanding Freshman Student
- Faculty & Staff Discretionary Awards
- Incoming Freshmen Awards
- Incoming Transfer Awards
- Betty Tracy Award
- Jean Gipe Award
- Hub Endowment Award

Professor Jean Gipe who retired assisted the department Chair in revitalizing the department website to have more web traffic. Also, the department created a Facebook page with AMM department activities, student projects, videos, etc. to reach a wider audience.

### **5.j. External Funding**

During the review period the department was able to secure \$457,757 as external grants/contracts (Table 5.14). The department also received material (fabrics and other) gifts from the industry. ETON systems made a software upgrade donation for \$13000 as matching research project funds.

Table 5.14: External Grants

<b>Year</b>	<b>PI Last Name</b>	<b>PI First Name</b>	<b>Project Title</b>	<b>Funding Agency</b>	<b>Amount Funded</b>
2010	Heimler	Ronald	Attitudes of Graduates, Faculty and Employers Regarding Skills and Competencies Needed by Graduates of Agricultural Education Programs for Successful Entry-Level Employment in the California Agricultural Sector	Agricultural Research Initiative (ARI)	\$ 9,852
2011	Heimler	Ronald	Focus on the Future: Cultivating a 21st Century Multicultural Workforce in the Agricultural Sector	U.S. Department of Agriculture (USDA)	\$ 289,000
	Senanayake	Muditha	Need Analysis: Assessing Technology Literacy Skills for Hispanic and Other Minority College Students	The Regents of the University of California, Office of the President, MESA	\$ 10,000
2013	Heimler	Ronald	Skills and Competencies Needed by Graduates of Agricultural Programs for Entry-Level Employment in the California Agricultural Sector	Agricultural Research Initiative (ARI)	\$ 2,072
2014	Heimler	Ronald	Sowing the Seeds for a Multicultural 21st Century in the Agricultural Sector	U.S. Department of Agriculture (USDA)	\$ 146,833
				Total	\$ 457,757

## 6. SUGGESTIONS FOR ACTION.

### A. Program Development

#### The Issues

The AMM program has continued to see growth in demand for graduates from the apparel production and fashion retail sectors, specifically in southern California. This demands the program keep abreast of changes in technology, thinking, practice, and circumstances in the apparel production and fashion retail fields. As discussed in this review, the department has identified changes needed and has implemented some using existing recourses. The growth of the program demands new resources in terms of facilities, equipment, faculty, staff, student assistants and operating budget.

The department is working currently with two key issues;

- We have two curriculums to implement; the significantly restructured semester BS curriculum and the proposed Masters curriculum in International Apparel Management.
- With the introduction of two new programs, student advising needs and demands on faculty will significantly increase.

#### With Existing Resources

An area currently being developed is the implementation of the BS program for semester conversion with a significantly revised program structure including the new Textile option and two new emphases under the Fashion Retailing Option. This is in addition to the number of new courses proposed to shape the curriculum to cater for the industry needs over the next 5-10 years.

Currently, the department is revising the MS program for semester conversion with minor revisions requested by the Chancellor's office. Both these programs have to be implemented during the next 1-2 years.

For semester conversion, which has involved significant degree of course consolidation due to unit differences and an effective increase in GE unit requirements, we have simplified the curriculum to remove confusing electives requirements and maintain the core courses that characterize the unique depth and breadth of the AMM. We anticipate the simplification will reduce advising needs and improve graduation rates.

Since the existing curriculum has been frozen for two years we have tried out a number of experimental courses such as: social media for fashion, fashion sustainability, and apparel brand management. These will be implemented as permanent courses under semester conversion.

The certificate courses that were developed from the existing curriculum will be reviewed and offered once they are processed through the next cycle of the curriculum revision process. The primary purpose of these courses is to reinvigorate the department's outreach activity to the local industry. They can be met from existing resources to the extent they would be self-financing. A secondary aspect of these courses would be to provide additional training opportunities for existing undergraduates beyond the program.

#### With New Resources

Going forward there is an opportunity through enrollment growth and a broadening in the scope of programs to develop a separate school of apparel management and technology.



## **B. Student Learning and Assessment**

### The Issue

With the addition of new members, the faculty have sought to enhance the BS program, as evidenced by the extensive curriculum changes over the review period. The relevance of the curriculum is constantly evaluated by a combination of methods, including our industry related scholarly activities, participation in professional bodies and meetings (ITAA, AATCC, FGI, ACRA and AAFA), and by our close day to day connections with the industry (through site visits, executive speakers, and our industry advisory board). The faculty have been working to expand the digital product and process technologies incorporated into the curriculum, including 2D and 3D CAD systems, product life cycle management, enterprise resource planning, ecommerce, digital embroidery, digital textile and garment printing. In addition, the business content has been strengthened by increasing emphasis on sustainability, brand management, and entrepreneurship. Critical thinking and problem solving within the curriculum are being strengthened through student centered-learning approaches, undergraduate research and the introduction of reflective papers on learning across all major courses. Under semester conversion, the evolution of the curriculum is set to continue with increased focus on: business and scientific research methods, quantitative and qualitative analytical skills, textiles, emerging technologies and novel business management skills.

### With Existing Resources

With regard to program updating and student learning outcomes, faculty have been developing and implementing curriculum and instructional changes to address these needs. Internal funding, such as SPICE grants, a Provost's award, and funds from the College have been secured to add new technologies, including the creation of a digital production lab. We need to reinvigorate our assessment of learning to keep up with WSCUC requirements. The faculty have plans to update and re-implement the senior student survey to better capture student attainment and workforce preparation. The peer evaluation of teaching document was revised to include evaluation of student learning outcomes in addition to capturing instructor performance. Recently we have also revised the student instructional assessment survey implemented for all courses every quarter to include assessment of learning.

### With New Resources

Increased capital investment funds are needed to acquire and integrate emerging digital technologies being adopted in the industry. The department recently started employing student tutors to help improve learning in selected high 'DWF' course using one-off state funding. Preliminary results indicate it to be a success. We would like to continue this effort on a permanent basis and need new funds to cover costs. Most fundamentally, additional tenure track faculty are necessary to improve our major to faculty ratio and attain our long term goals.

## **C. Advising**

### The Issue

Student advising needs have grown not just with enrollment growth (a typical advising load has been 70) but also because students have become more dependent on faculty for support, especially due to the difficulties in reconciling their work schedules with course availability.

The intricacies of the curriculum such as GE requirements, graduate writing test, optional restricted electives, capacity limitations and difficulties of finding classes that fit with their off campus work schedules all serve to increase advising needs. Transfer students pose a particular challenge in getting all transferable credits articulated, and in getting them synchronized with the course sequence in the program. With semester conversion, advising demands will grow further. The addition of a dedicated advisor in the college in 2014, who specializes in advising freshmen and sophomores, which is about a quarter to a third of the current student population, have provided some relief. However, faculty currently have more than 50 advisees each.

With Existing Resources

The My Planner Individualized Academic Plan is currently being implemented and will be helpful in two ways: to keep a permanent online record of advising in the system that will save the advisor's time, as most students are stubbornly unorganized and typically forget or lose advising materials.

With New Resources

With around 410 majors, the department really needs a dedicated advisor who could also double as a career counsellor during times of the quarter/ semester when advising needs are lower. Such an appointment would alleviate the advising load on faculty and strengthen relationships with industry to improve graduate placement and better fulfill the department's and university's mission.

**D. Faculty**

The Issue

As with many growing programs, the expansion of tenure track lines has lagged enrollment growth. Over the review period, there has been an increase of 156 majors for the net addition of two tenure track faculty. The number of part time faculty has been expanded to meet instructional demands. While these are effective instructors, they do not contribute to service, including the longer-term development of the program. Consequently, tenure track faculty serve on all (not a just a few) department committees as well college and university level committees. This 'service stretch' negatively impacts the development of department programs, scholarship and industry relationships, all of which are critical to the attainment of the department's objectives.

With Existing Resources

The faculty continue to maintain scholarship activities and industry relationships. Freeing faculty time from some advising and teaching activities is the best way to advance these, as expected by the university with teacher-scholar mission. However, the faculty recognize that external grant-raising is also an important element of this.

With New Resources

The AMM program has been recognized among the top 20 in its field nationally, providing the university with a unique opportunity to build an internationally recognized program in what is a leading international center for this major industry. To meet the needs of enrolment growth, scholarship requirements, and to enable the launch of the new Masters program, the semester

curriculum, and other planned programs, there is a need to increase the number of AMM tenure track faculty lines significantly.

## **E. Support Staff**

### The Issue

The department has one secretary and one technician, something it has enjoyed since it had around 100 majors. Despite its subsequent growth to 400+ majors, and its increasing technological intensity and diversity, no new staff have been added. The department has been fortunate in that its staff are flexible in assuming additional duties, and well-motivated helping them cope with overloads. Nevertheless, the increasing workload and diversity of demands made on staff have affected morale and job performance (through errors arising from overload). The department's annual budget for Instructional Student Assistants is \$1,000 and does not cover the needs of one faculty member who (during the academic year) is responsible for teaching four sections of a GE course with a typical enrollment of 90 per section.

### With Existing Resources

With regard to department clerical administration, issues could be alleviated by the provision of mandatory training/ refresher courses, and discussions on software systems and administrative procedures. Concerning equipment and classroom facilities, many routine problems and maintenance tasks relating to equipment and software are handled by our equipment technician or the IT division. For specialist repairs and servicing we use vendors or off-campus contractors.

### With New Resources

As a broader range of specialist machinery and industry software is used over a greater number of courses, there will be a need for more staff support and IT support for the department.

The department also needs more funds to provide student administrative support to the ASC and to provide Instructional Student Assistants (ISA) for faculty. Ideally, each full time faculty member should have access to at least 10 hours of ISA time per week.

Given the expansion of programs, the need to outreach, and to share the workload of enrollment growth, an Associate Department Chair position is suggested. To implement the MS program, a Graduate Program Coordinator position is provided for in the budget model.

As noted above, the department would benefit greatly from a specialist academic advisor.

## **F. Budget Resources**

### The Issue

Technology is changing rapidly and as a technology intensive program we do not have a choice but move on with new technologies. -As the program has grown in size and scope and with more usage of these equipment and new software programs, the need for more substantial budget resources is critical.

### With Existing Resources

The department continues to recognize that there are always areas to generate savings without unduly impacting program quality. The department continuously scrutinizes costs to identify

areas for savings. For example, changing faculty practices to share documents electronically with students; building relationships with software vendors who provide their systems and/or support for free; by performing basic maintenance activities in-house rather than using outside contractors; faculty volunteering with students to ‘beautify’ the department before special events.

#### With New Resources

As discussed elsewhere in this section, the department sees the need for greater budgetary resources to support investment in people, facilities, equipment, and systems. The department recognizes the importance of external fund raising to meet its objectives and was active throughout the review period in this direction. Even though the faculty was successful in obtaining internal funding such as SPICE grants to purchase equipment, it needs additional support to acquire big-ticket items. This process is greatly assisted where there is a demonstrable commitment by the university to support the program. An important issue is that having some capital expenditure funding in the first place can enable the department to use this as leverage to obtain equipment at a large discount.

### **G. Facilities**

#### The Issue

The AMM building (Building 45 designated as Agriculture Engineering) provided the space for the department’s expansion over the review period. However, the building was built as a workshop to fix agricultural equipment and not purpose-designed for teaching. Also, it is shared with the Landscape and Irrigation Science component of the Plant Science department and with the wood model shop of the College of Environmental Design. Despite the number of classroom and lab improvements during the review period, there is need for more remodeling of space to meet the program’s existing and future needs. More lab space is required for textile and coloration equipment, and for a second full size computer lab. Similarly, being located nearly a mile from the center of campus and its study and lounge facilities, there is a need to convert space into a student lounge/study room.

#### With Existing Resources

The department is seeking to make the best use of its classroom resources by spreading more classes into evenings and increasing its use of Friday classes. It is also discussing weekend classes. Student study and lounge space has been created but is far from optimal in size, location or suitability.

During the review period the department (and Plant Science) lost the use of one classroom to the College of Environmental Design. This room was designated as a lab, preventing AMM from scheduling classes there. However, (as a review of the room schedule will show) this room has hardly been used by ENV and is not used as a lab. Recovering access to this space would help with class scheduling bottlenecks for AMM (and Plant Science).

#### With New Resources

With the increasing need for computer-based classes, and to overcome running one computer class between two labs (45-125 and 45-126), the department is planning to convert 45-125 computer lab in to a bigger lab space by remodeling and merging the adjacent printing and study resource center to a large integral computer lab. Room 45-126 could then become a dedicated computer-equipped study space for students.

The department has a space (the mezzanine) without windows, lighting, and proper climate control that could be remodeled to be a student lounge/ study area. This space can be used as a student lounge and a study room with appropriate upgrades.

It is a key objective of the department to find donors to support refurbishment of the facilities in building 45, or alternatively to support creation of a new building.

## **H. Equipment**

### The Issue

The department has an extensive array of older equipment that needs upgrading. As new technology continues to drive the apparel production and fashion retail sectors, the department is faced with having to broaden the range of product and process technologies (manufacturing and business) it supports for instructional and research purposes. With regard to computer resources, the department is also in need for high-end computers especially to run programs such as 3D CAD. Most software programs that are used for teaching also need costly version upgrades in a timely manner as faculty have to have the latest versions of these programs to grade student assignments which are mostly completed with the latest versions.

### With Existing Resources

Use of specialized software systems within the curriculum has steadily expanded to include the programs in classes/labs/activities. The department is seeking to update and expand its range of industry software systems. Faculty have been evaluating alternative solutions and building relationships with software suppliers to seek donations of software, associated hardware and of training and support essential to include these technologies into the program.

Recently, the department has been successful in obtaining major donations of critical software systems and training but has not secured donations of production or testing equipment (though it has secured significant discounts beyond the education price).

### With New Resources

It is expected that the use of specialist technologies will continue to expand. Currently, the department is reviewing various systems to create a seamless concept-to-consumer platform that will provide cutting-edge knowledge and support integration of the curriculum. In regards to developing a digital technology lab, the department needs additional support to acquire expensive equipment such as weaving, knitting and coloration machinery.

## **I. Library Resources**

There is the need for more digital media as we move towards more hybrid and online teaching that needs digital media sharing rather than borrowing physical copies. This can be achieved with the existing resources utilizing the campus media vision and studio 6 resources. Further, to better match the reality of student availability, greater emphasis is necessary on online resources rather than hard copy resources is required.

## 9. FACULTY PARTICIPATION

*Peter Kilduff*

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Dr. Peter Kilduff, Professor & Chair

*Muditha Senanayake*

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Dr. Muditha Senanayake, Assistant Professor

*Chitra Dabas*

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Dr. Chitra Dabas, Assistant Professor

*Jiangning Che*

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Dr. Jiangning Che, Assistant Professor

*Angella Kim*

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Dr. Angella Kim, Assistant Professor

*Saemee Lyu*

---

Dr. Saemee Lyu, Assistant Professor

*Linda Tucker*

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Dr. Linda Tucker, Lecturer

# APPENDIX A:

## AMM Curriculum Sheets 2013/14





**California State Polytechnic University, Pomona  
Degree Curriculum Sheet**

Plan (Major) **APPAREL MERCHANDISING AND MANAGEMENT**

Catalog Year **2013-2014**

Name \_\_\_\_\_

TGA \_\_\_\_\_  
GWT Satisfied \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_

Subplan/Option **Apparel Production**

Minimum Units Required **180**

Student ID \_\_\_\_\_

Required Core Courses		
Course		Units
Fashion Industry	AMM 101	4
Digital Illustration for Fashion Lab	AMM 112L	1
Intro to Textile Science	AMM 160/160L	3/1
Apparel Design Analysis	AMM 210/210A	2/1
Fashion Promotion	AMM 230	3
Apparel Merch Buying	AMM 251/251A	3/1
Textile Fabrication	AMM 260/260L	3/1
Apparel Product Analysis	AMM 301/301L	2/1
Design and Merchandising Strategies	AMM 310/310A	2/1
Apparel Professional Development	AMM 341	3
Apparel Importing & Exporting	AMM 357	3
Textile Specification Buying	AMM 360/360A	2/2
Apparel Production	AMM 381/381L	3/1
Internship	AMM 442	3
Dynamics of the Global Apparel Complex	AMM 457	4
<b>Total Units</b>		<b>50</b>

Required Subplan/Option Courses		
Course		Units
Introduction to Pattern Making	AMM 214/214A	1/2
Apparel Technical Design	AMM 314/314A	2/2
Senior Project I	AMM 461	2
Senior Project II	AMM 462	2
Apparel Product Development II	AMM 414/414A	2/2
Apparel Production Simulation	AMM 492/492A	2/2
<b>Fashion Design Management Track A - Select 5 units from the following with approval from advisor:</b>		
Apparel Production Lab	AMM 180L	1
Apparel Product Development I	AMM 410/410A	2/2
<b>-OR-</b>		
<b>International Apparel Management Track B - Select 7 units from the following with approval from advisor:</b>		
Apparel Sourcing & Supply Chain Management	AMM 453	3
Advanced Apparel Production	AMM 481/481L	3/1
<b>Total Units</b>		<b>24-26</b>

Required Support Courses		
Course		Units
Accounting for Agribusiness	ABM 224	4
or Financial Accounting for Decision Making	ACC 207/207A	(4/1)
or Industrial Costs & Control	IME 239	(3)
Orientation to the College of Agriculture	AG 100	1
Agriculture and the Modern World (D2)	AG 101	4
Ethical Issues in Food, Agricultural & Apparel Industries (C4 or D4)	AG 401	4
Consumer Chemistry	CHM 101/101L	3/1
or General Chemistry (B1, B3)	CHM 121/121L	(3/1)
or Fundamentals of Physics (B1)	PHY 102	(4)
Spanish or Chinese (C3)	FL xxx	4
Leadership	MHR 450	4
Statistics with Application (B4)	STA 120	4
<b>Fashion Design Management Emphasis A - Select 10 units from the following courses with approval from advisor:</b>		
Introduction to Drawing	ART 140A	3
or Introduction to Design	ART 150A	(3)
Foundations of Drawing	ART 141A	3
or Intro. to the Computer as a Medium	ART 155A	(3)
Creativity & Entrepreneurship	MHR 321	4
<b>-OR-</b>		
<b>International Apparel Management Emphasis B - Select 8 units from the following with approval from advisor:</b>		
Data Mgmt for Agribusiness	ABM 375	4
or Managerial Statistics	TOM 302	(4)
Production Control	ETP 276/276L	3/1
or Work Analysis & Design	IME 224/224L	(3/1)
or Operations Management	TOM 301	(4)
<b>Total Units</b>		<b>36-44</b>

Restricted Support Electives		
Course		Units
Select a sufficient number of courses so that the total from "Required Subplan/Option", "Required Support," "GE," and "Restricted Support Electives," is at least 130 units.		0-22
See list on reverse. You must see your academic advisor in AMM to determine your requirements for electives.		
<b>Total Units</b>		<b>0-22</b>

General Education Requirements		
Area		Units
<b>Area A Communication &amp; Critical Thinking</b>		<b>12</b>
1 Oral Communication		
2 Written Communication		
3 Critical Thinking		
<b>Area B Mathematics &amp; Natural Sciences</b>		<b>16</b>
<i>Select at least one lab course from sub-area 1 or 2.</i>		
1 Physical Science		
2 Biological Science		
3 Laboratory Activity		
4 Math/Quantitative Reasoning		
5 Science & Technology Synthesis		
<b>Area C Humanities</b>		<b>16</b>
1 Visual and Performing Arts		
2 Philosophy and Civilization		
3 Literature and Foreign Language		
4 Humanities Synthesis		
<b>Area D Social Sciences</b>		<b>20</b>
1 U.S. History, Constitution, American Ideals		
2 History, Economics and Political Science		
3 Sociology, Anthropology, Ethnic & Gender Studies		
4 Social Science Synthesis		
<b>Area E Lifelong Understanding &amp; Self Development</b>		<b>4</b>
<b>Total Units</b>		<b>68</b>

American Institutions		
Courses that satisfy this requirement may also satisfy G.E. Area D1		8

American Cultural Perspectives Requirement		
Refer to catalog for list of courses that satisfy this requirements. Course may also satisfy major, minor, GE, or unrestricted elective requirements.		4

The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.		
Course		GE Area
General Chemistry	CHM 121/121L	B1, B3
or Fundamentals of Physics	PHY 102	(B1)
Statistics with Applications	STA 120	B4
Spanish or Chinese	FL xxx	C3
Agriculture and the Modern World	AG 101	D2
Ethical Issues in Food, Agricultural & Apparel Industries	AG 401	C4 or D4
The remaining GE requirements may be satisfied by any course approved for that area.		

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree. A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

**Apparel Production (continued)**

2013-2014

<b>Restricted elective choices (0-22 units)</b>		CIS 101 Intro to Microcomputing	4	<b>International Apparel Management Track B</b>	
AMM 108 Culture, People, and Dress	4	EC 201 Principles of Economics	4	ETP 300 Applied Total Quality Management	3
AMM 120 American Demographics and Lifestyles	4	or EC 202 Principles of Economics	(4)	FLXXX Foreign Language (Spanish or Chinese)	4
AMM 200 Special Study for Lower Division	1-2	FRL 201 Leg Env Bus Transactions	4	IE 392 Principles of Productivity Engineering	3
AMM 245 Consumerism: Impact & Issues	4	MHR 301 Principles of Management	4	TOM 301 Operations Mgmt	4
AMM 270/270A Visual Merchandising/Store Design	2/1	MHR 405 Training and Development	4	TOM 309 Logistics Mgmt	4
AMM 299 or 499 Special Topics	1-4	TOM 434 Purchasing Management	4	TOM 432 Production Mgmt	4
AMM 350 Retail Planning, Allocating and Forecasting	1-4	TOM 401 Quality Management	4		
AMM 400 Special Study for Upper Division	1-4	<b>Fashion Design Management Track A</b>			
AMM 420 International Apparel Marketing Research	4	ABM 402 Agribusiness Personnel Mgmt.	4		
AMM 431 Elective Internship	1-2	COM 103 Interpersonal Communication	4		
AMM 445 Field Study	1-8	MHR 313 First line Management	4		
AMM 476 Fast Fashion Retailing	4	MHR 318 Organizational Behavior	4		
ART 212 History of Western Art	4	MHR 320 Introduction to Entrepreneurship	4		
ART 213 History of Western Art	4	TH 481 History of Costume	4		
ART 214 History of Western Art	4				
ART 216 History of Asian Art	4				

*Any other course taken as an elective must have prior written approval by your AMM Advisor and will require a petition approved by the Dept. Chair. It is strongly recommended students take Chemistry to satisfy GE B1 requirements.*

**You must see your AMM Department Advisor to complete the charts below. To find out who your advisor is check at the AMM Dept. Office (Bldg. 45 - Room 152) or on the AMM Dept. site in---- blackboard.csupomona.edu .**

Which courses have been taken to satisfy GE?

	GE Category	Y or N
AG 101	D2	
STA 120	B4	
CHM or PHY (CHM 121/L and PHY 102 only)	B1	
SPAN or Chinese	C3	
AG 401	C4 or D4	
Total Units		

What electives will be taken? (0-22 units)


**Please take note of the following.** This display of degree requirements is to be used in conjunction with advising documents available in the AMM Dept. office and on the AMM Dept. site in [blackboard.csupomona.edu](http://blackboard.csupomona.edu) (access restricted to currently declared AMM students). The advising documents are a 4-year Plan, Prerequisite Trails, and a 4-year Schedule of Classes. Most of the advising documents are also available on the AMM Dept. website at [www.csupomona.edu/~amm](http://www.csupomona.edu/~amm). There is additional information (including course descriptions) in the University Catalog for 2009-2011 at [http://www.csupomona.edu/~academic/catalog/col\\_schol/CoAg.pdf](http://www.csupomona.edu/~academic/catalog/col_schol/CoAg.pdf) . To graduate in 4 years, a student must take at least 15 units in 3 quarters during the year, or 45 units per year. This is a full load that requires a minimum of 15 hours in the classroom per quarter and another 30 hours outside the classroom to successfully complete course work. Students should severely restrict part-time work hours if they are taking 15 units.



**California State Polytechnic University, Pomona  
Degree Curriculum Sheet**

Plan (Major) APPAREL MERCHANDISING AND MANAGEMENT Catalog Year 2013-2014 Name \_\_\_\_\_ TGA \_\_\_\_\_  
 Subplan/Option Fashion Retailing Minimum Units Required 180 Student ID \_\_\_\_\_ GWT Satisfied Yes No

Required Core Courses		
Course		Units
Fashion Industry	AMM 101	4
Digital Illustration for Fashion Lab	AMM 112L	1
Intro to Textile Science	AMM 160/160L	3/1
Apparel Design Analysis	AMM 210/210A	2/1
Fashion Promotion	AMM 230	3
Apparel Merch Buying	AMM 251/251A	3/1
Textile Fabrication	AMM 260/260L	3/1
Apparel Product Analysis	AMM 301/301L	2/1
Design and Merchandising Strategies	AMM 310/310A	2/1
Apparel Professional Development	AMM 341	3
Apparel Importing & Exporting	AMM 357	3
Textile Specification Buying	AMM 360/360A	2/2
Apparel Production	AMM 381/381L	3/1
Internship	AMM 442	3
Dynamics of the Global Apparel Complex	AMM 457	4
<b>Total Units</b>		<b>50</b>

Required Subplan/Option Courses		
Course		Units
Visual Merchandising/Store Design	AMM 270/270A	2/1
Apparel Retailing	AMM 330	3
Retail Planning, Allocating and Forecasting	AMM 350	4
Apparel Retail Practicum	AMM 370A	1
Apparel Market Analysis & Reporting	AMM 443A	2
Apparel Sourcing & Supply Chain Management	AMM 453	3
Apparel Retail Simulation I Activity	AMM 454A	1
Apparel Wholesale Operations	AMM 471	2
Apparel Retail Simulation II Activity	AMM 472A	1
Issues in Apparel Retail Management	AMM 496	3
Apparel Retail Simulation III Activity	AMM 497A	1
<b>Total Units</b>		<b>24</b>

Required Support Courses		
Course		Units
Accounting for Agribusiness	ABM 224	4
or Financial Accounting for Decision Making	ACC 207/207A	(4/1)
or Industrial Costs and Controls	IME 239	(3)
Orientation to the College of Agriculture	AG 100	1
Agriculture and the Modern World (D2)	AG 101	4
Ethical Issues in Food, Agricultural and Apparel Industries (C4 or D4)	AG 401	4
Consumer Chemistry	CHM101/101L	3/1
or General Chemistry (B1, B3)	CHM 121/121L	(3/1)
or Fundamentals of Physics (B1)	PHY 102	(4)
Spanish or Chinese (C3)	FL xxx	4
Principles of Marketing Management	IBM 301	4
Leadership	MHR 450	4
Statistics with Application (B4)	STA 120	4
Managerial Statistics	TOM 302	4
<b>Total Units</b>		<b>36-38</b>

Restricted Electives	
Course	Units
Select a sufficient number of courses so that the total from "Required Support," "GE," and "Restricted Support Electives" is at least 106 units.	0-22
See list on reverse. You must see your academic advisor in AMM to determine your requirements for electives.	
<b>Total Units</b>	<b>0-22</b>

General Education Requirements	
Area	Units
<b>Area A Communication &amp; Critical Thinking</b>	<b>12</b>
1 Oral Communication	
2 Written Communication	
3 Critical Thinking	
<b>Area B Mathematics &amp; Natural Sciences</b>	<b>16</b>
<i>Select at least one lab course from sub-area 1 or 2.</i>	
1 Physical Science	
2 Biological Science	
3 Laboratory Activity	
4 Math/Quantitative Reasoning	
5 Science & Technology Synthesis	
<b>Area C Humanities</b>	<b>16</b>
1 Visual and Performing Arts	
2 Philosophy and Civilization	
3 Literature and Foreign Language	
4 Humanities Synthesis	
<b>Area D Social Sciences</b>	<b>20</b>
1 U.S. History, Constitution, American Ideals	
2 History, Economics and Political Science	
3 Sociology, Anthropology, Ethnic & Gender Studies	
4 Social Science Synthesis	
<b>Area E Lifelong Understanding &amp; Self Development</b>	<b>4</b>
<b>Total Units</b>	<b>68</b>

American Institutions	Units
Courses that satisfy this requirement may also satisfy G.E. Area D1	8

American Cultural Perspectives Requirement	Units
Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.

Course		GE Area
General Chemistry	CHM 121/121L	B1, B3
or Fundamentals of Physics	PHY 102	(B1)
Statistics with Application	STA 120	B4
Spanish or Chinese	FL xxx	C3
Agriculture and the Modern World	AG 101	D2
Ethical Issues in Food, Agricultural and Apparel Industries	AG 401	C4 or D4

The remaining GE requirements may be satisfied by any course approved for that area.

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.  
 A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

**Fashion Retailing** (continued)

2013-2014

<b>Restricted elective choices (0-22 units)</b>			IBM 302	Marketing Strategy	4	ABM 402	Agribusiness Personnel Management	4
AMM 108	Culture, People and Dress	4	IBM 402	Product and Brand Management	4	FRL 201	Leg Env Bus Transactions	4
AMM 180L	Apparel Production Lab	1	IBM 411	Buyer Behavior	4	IBM 306	Professional Selling	4
AMM 120	American Demographics & Lifestyles	4	TOM 309	Logistics Management	4	IBM 308	Retail Management	4
AMM 200	Special Study for Lower Division	1-2				IBM 447	Retailing Problems	4
AMM 245	Consumerism: Impact & Issues	4				MHR 318	Organizational Behavior	4
AMM 299 or 499	Special Topics	1-4				MHR 320	Introduction to Entrepreneurship	4
AMM 314/314A	Apparel Technical Design	2/2				TOM 401	Quality Management	4
AMM 400	Special Study for Upper Division	1-2				TOM 434	Purchasing Management	4
AMM 420	Int. Apparel Marketing Research	4						
AMM 431	Elective Internship	1-8						
AMM 445	Field Study	1-8						
AMM 476	Fast Fashion Retailing	4						
CIS 101	Intro to Microcomputing	4						
EC 201	Principles of Economics	4						
or EC 202	Principles of Economics	(4)						
FLXXX	Foreign Language (Spanish or Chinese)	4						
		4						
TOM 301	Operations Mgmt							

Any other course taken as an elective must have prior written approval by your AMM Advisor and will require a petition approved by the Dept. Chair.  
It is strongly recommended students take Chemistry to satisfy GE B1 requirements.

**You must see your AMM Department Advisor to complete the charts below. To find out who your advisor is check at the AMM Dept. Office (Bldg. 45 - Room 152) or on the AMM Dept. site in---- [blackboard.csupomona.edu](http://blackboard.csupomona.edu) .**

Which starred courses have been taken to satisfy GE?

	Category	Y or N
* AG 101	D2	
*STA 120	B4	
*CHM or PHY(CHM 121/L and PHY 102 only)	B1	
*SPAN or Chinese	C3	
*AG 401	C4 or D4	
Total Units		

What electives will be taken -- 0 -22 units?


**Please take note of the following.** This display of degree requirements is to be used in conjunction with advising documents available in the AMM Dept. office and on the AMM Dept. site in [blackboard.csupomona.edu](http://blackboard.csupomona.edu) (access restricted to currently declared AMM students). The advising documents are a 4-year Plan, Prerequisite Trails, and a 4-year Schedule of Classes. Most of the advising documents are also available on the AMM Dept. website at [www.csupomona.edu/~amm](http://www.csupomona.edu/~amm). There is additional information (including course descriptions) in the University Catalog for 2009-2011 at [http://www.csupomona.edu/~academic/catalog/col\\_schol/CoAg.pdf](http://www.csupomona.edu/~academic/catalog/col_schol/CoAg.pdf) . To graduate in 4 years a student must be taking an average of 15 units each of 3 quarters or 45 units per year. This is a full load that requires a minimum of 15 hours in the classroom per quarter and another 30 hours outside the classroom to successfully complete course work. Students should severely restrict part-time work hours if they are taking 15 units.

**APPENDIX B:**

**FACULTY CVs**

# Jiangning Che

## PERSONAL PROFILE

Email: jche@cpp.edu & Phone: 909.869.4950 & Fax: 909.869.4333

Address: Rm. 255 - Building 45, 3801 West Temple Ave, CA-91768

## EDUCATION BACKGROUND

### **1996.02-2002.03 China Textile (Dong Hua) University, Shanghai, P.R. China**

- Ph.D. in Textile Chemical & Coloration Engineering, College of Textile Chemistry Engineering; "Computer Color Measuring and Matching of Pre-colored Fiber Blends"
- M.S. degree in Textile Chemistry & Coloration Engineering, College of Textile Chemistry, Engineering; "Study on the Coloration Performances of Spandex Fiber"

### **1992.09-1996.07 Northwest Textile Institute of Technology, Xian, P.R. China**

- B.S degree in Dyeing & Finishing Engineering (Department of Textile Chemistry, Engineering); "A Study on Degum Treatment of Spun-Silk with Plasma Technology"

## WORKING EXPERIENCES

### **2013.09-Present Assistant Professor, Apparel Merchandising and Management Department, California State Polytechnic University, Pomona**

- Area of interest in Color Science & Technology, Textile Science, Textile Quality, and Textile Coloration.
- Research on Textile & Color science and related disciplines.

### **2011.06-2016.06 Part-time External Advisor of Graduate Student, Chemical Engineering & Biotechnology, College of Chemistry, China Textile (Dong Hua) University, Shanghai, P.R. China**

- Supervised graduate & undergraduate students in their research work

### **2010.06- 2013.04 Director of Industry Color Application and Support, Color & Imaging Institute (TASCII), Tsinghua University, Beijing, P.R. China**

- Cooperated with National Associations of industry and develop color related solutions (Digital/Physical color standard service, color standard operation procedure, color application system etc.)
- Provided and promoted digital color solutions for different industry segments such as textile and apparel.
- Implemented TASCII consulting projects with industry clients
- Conducted research projects.

### **2002.05-2010.05 Regional Technical Manager of China, Datacolor International, Shanghai, P.R. China**

- Supervised team members for routine China Support, Training, Service, and Accreditation
- Maintained international key accounts/Brand accounts and developed new account in China and Asia
- Organized technical seminar/gave lectures and presentation on technical and academic conference
- Worked with research and development department to identify and solve the application issues.
- Provided support to global textile & apparel brands/retailers such as Mars & Spenser, Decathlon, H&M, Timberland, Gloria Jeans, Perry Ellis, JCPenny, Wal\*Mart, Nike, Adidas, Triumph etc.

**PUBLICATIONS:**

1. Jiangning Che, Muditha Senanayake, *Statistical Analysis for Correlation Approach to Compensate the Measured CIELAB Colorimetric Data for Temperature Alterations, Color Research and Application*, Submitted for Peer Review.
2. Jiangning Che, Rong Li, Muditha Senanayake, *A Comparative Study on the Dependency of Colour Measurement on Surface Temperature*, *Coloration Technology*, 2016, 132(4): 144-152
3. Jiangning Che, Yong Zhang, "A Comparative Study on Color Fastness Evaluation using Visual, Spectrophotometer, and Imaging System uses Fabrics for Special Police Uniform", *Proceedings of International Textiles & Costume Congress (ITCC)*, Istanbul, Turkey, Nov. 4-6, 2015, Accepted for presentation.
4. Jiangning Che, Muditha Senanayake, "An Analysis of the Thermochromism Properties of Colored Composite Materials", *Proceedings of Inter-Society Color Council (ISCC) International Conference*, Indianapolis, IN, USA, Oct. 4-6, 2015, Accepted for presentation.
5. Esthella Gonzalez, Cynthia L. Regan, Jiangning Che, *Comparative Analysis of Mechanical Properties for Pointe Shoe Fabrications*, *AATCC Journal Of Research*, 2015, 2 (6): 7-13
6. Rong Li, Jiangning Che, "Study on Synthesis of ZnO Nanorods and Its UV-blocking Properties on Cotton Fabrics Coated with the ZnO Quantum Dot", *Journal of Nanoparticle Research*, 2014, 16(9): 1-12.
7. Jiangning Che, Wenwen Song, *Digital Color Design of 'Chinese Red'- Methodology and Application*, *COLOR AND CULTURE*, *Proceedings of International Colour Association (AIC)*, Oaxaca, Mexico, Oct. 22-24, 2014
8. Jiangning Che, Rong Li, *Engineered Color with Digital Approach*, *Proceedings of American Society of Engineering Education (ASEE) - Gulf Southwest Conference*, Session: FF4-1, McNeese State University, Lake Charles, Louisiana, USA, March 24-26, 2010
9. Jiangning Che, Donghui Chen, *A Correction Method For Reflectance Measured With Optical Glass*, *Coloration Technology (J.S.D.C, UK)*, 2002, 118(2):49-51
10. Rong Li, Feng Gu, Jiangning Che, Donghui Chen, *Quantum Efficiency of Fluorescent Dyes in Cloth*, *Coloration Technology (J.S.D.C, UK)*, 2002, 118(5):250-255
11. Jiangning Che, Qinhua Yuan, Qinghua Zhu, *Application of Rear Earth Spin Finishes Chloride on PET/PA Composite Super-fine Denier Fiber*, *Journal of China Textile University (Eng. Ed. )*, 1998, 15(4): 76-78 )
12. Jiangning Che, Donghui Chen, *Chromaticity Characteristic of Colored Fiber Blends*, *Journal of Donghua University (Eng. Ed.)*, 2003
13. Jiangning Che, Donghui Chen, Zhihua Zhou, *Color Matching of Pre-colored Fiber Blends Based on the KUBELKA-MUNK Theory*, *Journal of Donghua University (Eng. Ed.)*, 2002, 28(3):28-30

**Professional****Activities:**

1. 2013~ NOW: Senior member of American Association of Textile Chemists and Colorists (AATCC)
2. 2016~ NOW: Associated Editor of AATCC Journal of AATCC
3. 2014~ NOW: Voting Member of Research Committee RA36 – Color Measurement, AATCC
4. 2015~ NOW: Senior member of Research Committee of RA111 – Electronically Integrated Textiles, AATCC
5. 2016~ NOW: One of three Education Pillars of AATCC California Section.
6. 2003~NOW: Reviewer of "Textile Research Journal", "Coloration Technology", "Clothing and Textile Research Journal", "AATCC Review", and "AATCC Journal of Research".

**Awards and Grants**

2015, Classroom Modernization Grant, Special Projects for Improving the Classroom Experience Program, Cal Poly Pomona. Weather-Ometer, Amount: \$17,795; Granted  
2015, Mini-Grant for Research, Scholarship, and Creative Activities Program (RSCA), 2015 – 2016, Cal Poly Pomona. Amount: \$5,000; Granted  
2017, The Faculty Mini-grant Program for 2016-2017, Cal Poly Pomona, \$840, Granted  
2015, Textile Colorfastness Testing, Special Consultant Project for AM4U, \$2414, Granted

## Chitra Srivastava Dabas

Assistant Professor, Department of Apparel Merchandising and Management  
California State Polytechnic University-Pomona Campus,  
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### Education

<i>Michigan State University</i>	<i>East Lansing, Michigan, USA</i>
Doctor of Philosophy in Retailing , December 2011	
<i>Michigan State University</i>	<i>East Lansing, Michigan, USA</i>
Masters of Sciences, Retailing, December 2008	
<i>National Institute of Fashion Technology</i>	<i>Bangalore, India</i>
Masters in Fashion Management, May 2006	
<i>Northern India Institute of Fashion Technology</i>	<i>Mohali, India</i>
Bachelors in Apparel Designing, September 2000	

### Professional Experience

<b>California State Polytechnic University, Pomona, USA</b>	
Assistant Professor,	September 2011-Current
<b>Michigan State University, East Lansing, USA</b>	
Graduate Assistant,	October 2006 – May 2011
<b>Rubric Apparels Pvt. Ltd., Noida, India</b>	
Merchandiser	April 2004 - June 2004
<b>U.K. Impex, New Delhi, India</b>	
Senior Merchandiser	October 2000 - March 2004

### Research

#### Research Interest

**Apparel and Fashion:** Changing needs of US consumer towards apparel and fashion preference; use of technology in fashion and apparel business.

**Retail Strategy:** Channel management (B2B relations), Entry mode choices of retailers, Retailing in international markets, Building customer satisfaction and loyalty in Omni-channel retail environment.

**Sustainability, Responsible Business Practices and Business Ethics:** Identifying strategies to encourage socially responsible production and consumption both by marketers and consumers.

#### Published and Accepted Manuscripts

- Erkan Ozkaya, Chitra Dabas, Kalin Kolev, Tomas Hult, Steven Dahlquist and Sonia Manjeshwar (2013), “An Assessment of Hierarchical Linear Modeling in International Business, Management, and Marketing”, *International Business Review*, 22(4), 663-677
- Chitra Srivastava Dabas, Brenda Sternquist and Humaira Mahi, (2012). “Organized Retailing in India: Upstream Channel Structure and Management”, *Journal of Business and Industrial Marketing*, 27(3), pp. 176-195
- Yun, Zee-Sun, Dawn Thorndike Pysarchik and Chitra Srivastava Dabas, (2012), “The Determinants of Retail Loyalty of Indian Consumer”, *Journal of Food Products and Marketing*, 18(4), pp. 268-286.
- Dabas, Chitra Srivastava and Brenda Sternquist (2011) Corporate Brand Positioning and Entry Mode Choices of International Retailers, *International Retailing Theory and Research*, B. Sternquist (ED) Haslett, MI: BSC Publisher, 131-166.



## Refereed Presentations

- Dabas, Chitra Srivastava and Angella Kim. (2016, April). Model of Wearable Technology Adoption: Examining the Influence of Technology, Individual, Social, and Product-related Predictors. Presented at American Collegiate Retailing Association Conference, Secaucus, NY.
- Dabas, Chitra Srivastava. (2015, May). Performance Outcome of CSR Behavior: Moderating Role of Motivation to engage. Presented at Academy of Marketing Science Conference, Denver, CO.
- Ozkaya, Erkan and Chitra Srivastava Dabas. (2012, May). An Assessment of Hierarchical Linear Modeling in International Business. Presented at Academy of Marketing Science Conference, New Orleans, LA.
- Dabas, Chitra Srivastava and Brenda Sternquist. (2012, May). Retail Employee Perception of Corporate Social Responsibility: How much is too much?. Presented at Joint conference by the American Marketing Association Retailing & Pricing SIG and the American Collegiate Retailing Association, Seattle, WA.
- Li, Jie, Dawn T. Pysarchik, Chitra Srivastava Dabas, and Yu Jong Pil. (2011, July), Psychosocial Dimensions of Supplier-Buyer Relationships in India, Proceedings the European Association for Education and Research in Commercial Distribution Conference, Parma, Italy.
- Srivastava, Chitra, Sung- Mi Lee, Dawn T. Pysarchik and Jie Li. (2010, July). Role of Social Influence on Food Store Retailing in India. Proceedings European Institute of Retailing and Service Studies Conference, Istanbul, Turkey.
- Srivastava, Chitra and Kyoung- Nan Kwon, (2010, May). What's in your cart?: Influence of Individual differences on product class specific online shopping. Proceedings Academy of Marketing Science Annual Conference, Portland, Oregon.
- Srivastava, Chitra and Sonia Manjeshwar, (2009, September). Isomorphism in International Retailing Context. Proceedings Joint conference by the American Marketing Association Retailing & Pricing SIG and the American Collegiate Retailing Association. New Orleans, LA.
- Srivastava, Chitra, Dawn Thorndike Pysarchik, Sung-Mi Lee and Zee-Sun Yun, (2009, September). Influence of Service Quality Dimensions on Food Retailers in India. Proceedings Joint conference by the American Marketing Association Retailing & Pricing SIG and the American Collegiate Retailing Association. New Orleans, LA.
- Martin, Caroline, Chitra Srivastava, Gregory Clare and Jing Zhao, (2009, September). Organic Food Choices among Competing Alternatives: US Perspective. Proceedings Joint conference by the American Marketing Association Retailing & Pricing SIG and the American Collegiate Retailing Association. New Orleans, LA.
- Srivastava, Chitra (2009, July). Determinants of Service Quality in Cross-Cultural Research: A Meta-Analytic Perspective. Proceedings World Marketing Congress, Oslo, Norway.
- Yun, Zee-Sun, Dawn Thorndike Pysarchik and Chitra Srivastava, (2009, June). The Effect of Functional Congruity and Social Self Congruity Motives on Indian Consumer's Food Store Patronage and Loyalty. Presented at the European Association for Education and Research in Commercial Distribution Conference, Surrey, England.
- Srivastava, Chitra and Brenda Sternquist, (2008, May). Brand Perspective: Influence of Retail Positioning on Entry Mode Choices. Presented at the American Collegiate Retailing Association, Durango, Colorado.
- Srivastava, Chitra, and Patricia Huddleston, (2007, June). Does it really sell?: Factors Influencing Purchase Decisions for Fair Trade Products. Presented at the European Association for Education and Research in Commercial Distribution, Saarbruecken, Germany.

## Undergraduate Presentations

- Johnson, Andrea and Savannah Crawford (2015, November). *Digital, Physical, Mobile, Oh My!! Examining the Influence of Omni- Channel Retailing on Consumer Patronage*. Poster session presented at the Southern California Conference on Undergraduate Research, Claremont, CA.  
Role: Faculty Mentor
- Murphy, Kristen and Elena Rhodes. (2016, March). *Acceptance of Aerobic Apparel with Heating and Icing Capabilities*. Poster session presented at the Cal Poly Pomona Student RSCA Conference, Pomona, CA.  
Role: Faculty Mentor

## Honors, Awards and Grants

- 2016, Classroom Modernization Grant, Special Projects for Improving the Classroom Experience Program, Cal Poly, Pomona. *Amount: 25,000*
- 2016, Teacher-Scholar Award, Cal Poly, Pomona. 4WTUs
- 2015, Teacher-Scholar Award, Cal Poly, Pomona. 4WTUs
- 2013-2014, Instructional Innovation Grant, Special Projects for Improving the Classroom Experience Program, Cal Poly, Pomona. *Amount: \$3335.68*
- 2011, Mary Louise Gephart Donnell Scholarship Award, MSU.
- 2011, Research Grant, College of Communication, Arts and Sciences, MSU.
- 2010, Research Fellowship Award, College of Communication, Arts and Sciences, MSU.
- 2010, S. C. Lee Best Graduate Paper Award, Asian Studies Center, MSU.
- 2009, Graduate Student Research Enhancement Award, Graduate School, MSU.
- 2009, Professional Development Grants, CIBER, MSU.
- 2007, 2008, 2009, 2010 and Fall 2009, Professional Development Grant, APRR, MSU
- 2008, Outstanding Graduate Student Award (Retailing), APRR, MSU.

## Service

- Reviewer, Journal: *Business Ethics- A European Review*, 2016.
- Reviewer, American Collegiate Retailing Association Conference, Secaucus, NY, 2016.
- Reviewer, Faculty Mini Grants, Center for Community Engagement, Cal Poly Pomona, Fall 2015.
- Session chair, Academy of Marketing Science Conference, Denver, Colorado, 2015.
- Reviewer, Academy of International Business Annual Conference, Bangalore, 2015.
- Reviewer, Academy of International Business Annual Conference, Vancouver, 2014.
- Reviewer, Journal: *The International Review of Retail, Distribution and Consumer Research*, 2013.
- Reviewer, Academy of Marketing Science Conference, Washington D.C., 2012.
- Reviewer, Academy of International Business Annual Conference, Japan, 2011.
- Reviewer, Academy of International Business Annual Conference, Rio de Janeiro, 2010.
- Reviewer, Academy of International Business Conference, UKI, 2009.

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- Reviewer, Society for Marketing Advances Conference, 2009.

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**Teaching**

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**Interest**

Retail Strategy, Quantitative Methods, Marketing Research, Merchandise Buying, Supply Chain Management, International Business.

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**Courses Taught**

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AMM-251, Apparel Merchandise Buying

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AMM251A- Excel for Apparel Merchandise Buying

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AMM-330- Apparel Retail Management

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AMM-350, Retail Buying-II

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AMM-453, Sourcing and Supply Chain Management

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AMM-443A, Apparel Market Research and Reporting

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AMM-463/463A, Apparel Research Project

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AMM-496, Advanced Topics in Apparels

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AMM-454A and AMM-497A: Apparelsapes Simulation Activity

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**DR. PETER KILDUFF**  
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## **CURRICULUM VITAE**

### **EDUCATION**

<b>HNC Business Studies</b> , Wolverhampton Polytechnic, UK	June 1977
<b>Diploma of the Institute of Marketing</b> , Leeds Polytechnic, UK	June 1980
<b>BA (Hons) Textile Management</b> , University of Leeds, UK	June 1983
<b>PhD</b> , (strategic analysis of UK textile/ apparel industries) Univ. of Leeds, UK	March 1990

### **EMPLOYMENT HISTORY**

<b>Professor and Chair</b>	Apparel Merchandising & Management, CPP	Jul 2006 - present
<b>Associate Professor</b>	Consumer, Apparel & Retails Studies, UNCG,	Aug 2002-Jun 2006
<b>Associate Professor</b>	College of Textiles, NC State University	Aug 1998-Jul 2002
<b>Unit Director/ Principal</b>	Textile Intelligence Centre, Leeds, UK	Jun 1992 - July 1998
<b>Lecturer/Senior Lecturer</b>	School of Textile Industries Univ. of Leeds, UK	Sep 1989–Jun 1998
<b>Management Consultant</b>	London Business Consultants, London, UK	Sep 1988 – Aug 1989
<b>Marketing Associate</b>	Carpets International plc, Kidderminster, UK	Sep 1975-Sep 1979

## ACHIEVEMENTS IN RESEARCH

### I. SCHOLARLY WRITING AND PRESENTATIONS (PEER REVIEWED)

#### 1. Peer-reviewed book chapter

- Kilduff, PDF, (2002) "An Overview of Global Dynamics in the Wool Textile Industry" in "Wool Science and Technology", Simpson, S and Crawshaw G (Eds), Woodhead Publishing, Cambridge, May, Chapter 12, pp333-359.

#### 2. Papers published in refereed journals and conference proceedings

**Peer-reviewed journal articles** (\_\_\_denotes primary or equal authorship)

- Kilduff, PDF & Jackson, KC, (1989) "The Competitive Characteristics of the Man-made Fiber Industry in Western Europe" Journal of the Textile Institute, Vol.80, No.2, pp185-202.
- Jackson, KC and Kilduff, PDF, (1991) "The UK Textile and Clothing Industries; Recent Performance and Future Prospects," Journal of the Textile Institute, Vol.82, No.2, pp179-193.
- Shaw, CH, Jackson KC and Kilduff PDF, (1993) "The Structural and Competitive Characteristics of the Taiwanese Man-made Fiber Industry." Journal of the Textile Institute, Vo.84, No.1, pp63-83.
- Shaw, CH, Jackson KC and Kilduff PDF, (1994) "Growth and Maturity in the Taiwanese Cotton Textile Industry." Journal of the Textile Institute, Vol.85, No.2, pp255-268.
- Shaw, CH, Jackson KC and Kilduff PDF, (1994) "Prospects for Upgrading in the Taiwanese Cotton Textile Industry." Journal of the Textile Institute, Vol.85, No.2, pp270-281.
- Chen KT, Jackson, KC, and Kilduff PDF, (1996) "Strategic Restructuring in the Taiwanese Textile Industry, with Particular Reference to Relocation" Journal of the Textile Institute, Vol.87, No.2, pp117-134.
- Wang XB and Kilduff, PDF, (1996) "Towards Global Textile/Apparel Development: Questionnaire Survey Analysis of Design Management in British Enterprises." Journal of the Textile Institute, Vol.87, No.2, pp144-160.
- Huang, CS, Chuter AJ, Kilduff, PDF, (1997) "In search of excellence: the use of ISO9000 in the textile industry", Journal of the China Textile Institute, Vol.7, No.4.
- Wang XB and Kilduff, PDF, (1999) "Structuring a Concurrent Design Environment for Effective Product Design and Development", Journal of the Textile Institute, Vol.90, Part 2, No.1, pp83-91.
- Kilduff, PDF, (2000) "Evolving Strategies, Structures and Relationships in Complex and Turbulent Business Environments: the Emerging Textile and Apparel Industries of the New Millenium Part 1" Journal of Textile and Apparel Technology and Management, Vol. 1, Issue 1, October. [www.tx.ncsu.edu/jtatm](http://www.tx.ncsu.edu/jtatm).
- Kilduff, PDF, (2001) "Evolving Strategies, Structures and Relationships in Complex and Turbulent Business Environments: the Emerging Textile and Apparel Industries of the New Millenium Part 2", Journal of Textile and Apparel Technology and Management, Vol. 1, Issue 2, January. [www.tx.ncsu.edu/jtatm](http://www.tx.ncsu.edu/jtatm).
- Altinoz, C, Kilduff, PDF and Winchester, SC Jr. (2001) [*Note: published in 2003 with a 2001 designation*]. "A fuzzy Approach to Supplier Selection: Part 1 - An Examination of the Issues", Journal of the Textile Institute, Vol.92, Part 2, No.2, pp128-140.

- Kilduff, PDF, (2002) “Strategic and Organisational Responses to Increasing Environmental Turbulence in the Textile and Apparel Industries”, International Journal of New Product Development and Innovation Management, March/April 2002.
- Chi, T., Kilduff, PDF and Dyer, CL (2005) “An assessment of US comparative advantage in technical textiles from a trade perspective” Journal of Industrial Textiles, Vol.35, Issue 1.
- Kilduff, PDF (2005) “Patterns of strategic adjustment in the US textile and apparel industries since 1979.” Journal of Fashion Marketing & Management, Vol 9, No. 2, 2005.
- Kilduff, PDF and Chi, T., (2006) “Longitudinal Patterns of Comparative Advantage in the Textile Complex Part 1” Journal of Fashion Marketing & Management, Vol.10 No. 2.
- Kilduff, PDF and Chi, T., (2006) “Longitudinal Patterns of Comparative Advantage in the Textile Complex Part 2”. Journal of Fashion Marketing & Management, Vol.10 No. 2.
- Chi, T and Kilduff PDF (2006) “An Assessment of Trends in China’s Comparative Advantages in Textile Machinery, Man-Made Fibers, Textiles and Apparel” Journal of the Textile Institute, Vol. 97, No.2, pp1-19.
- Kilduff, PDF and Chi, T (2007) “Analysis of Comparative Advantage in the Textile Complex – A Study of Eastern European and former Soviet Union Nations” Journal of Fashion Marketing & Management, Vol.11 No. 1, pp82-105.
- Chi, T; Kilduff, PDF; Gargeya, VB; and Dyer, CL. (2009) “Business Environment Characteristics, Competitive Priorities, Supply Chain Structures, and Business Performance: An Empirical Study of the U.S. Technical Textile Industry” International Journal of Intercultural Information Management. Issue: Volume 1, Number 4 / 2009, pp 407–432.
- Chi, T; Kilduff, PDF; and Gargeya, VB; (2009) "Alignment between business environment characteristics, competitive priorities, supply chain structures and firm business performance" International Journal of Productivity & Performance Management, Volume: 58, Issue: 7.
- Chi, T; Kilduff, PDF; (2010) "An empirical investigation of the determinants and shifting patterns of U.S. apparel imports using a gravity model framework" Journal of Fashion Marketing and Management, Volume: 14, Issue: 3.
- Chi, T; Kilduff, PDF; (2011) “Understanding Consumer Perceived Value of Casual Sportswear: An Empirical Study” Journal of Retailing and Consumer Services, Volume 18, Issue 5, September 2011, Pages 422-429
- 
- **Peer-reviewed papers presented at professional meetings (\_\_\_denotes presenter)**
- Wang XB and Kilduff, PDF (1995) “Structuring and modeling a teamworking co-ordination environment in product design and development” Textile Institute, Restructuring Manufacturing Conference, “Teamworking in the textile industry”, October, UK.
- Wang XB and Kilduff, PDF (1996) “Ensuring competitive advantage with concurrent design and teamworking co-ordination” Proceedings of the R&D Management Conference, Enschede, Netherlands, March.
- Huang, CS, Chuter, AJ & Kilduff, PDF (1996) “The implementation of ISO 9000 in the Taiwanese textile industry”, Proceedings of the International Conference on Quality, Yokohama, Japan, October.
- Kilduff, PDF (1997) “The dynamics of the global textile and clothing industries”, UK Textile Conference, University of Huddersfield, UK, April.
- Kilduff, PDF (1999) "Competitive strategies, organisational structures and business relationships in a complex and turbulent business environment: the textile and apparel

- manufacturer of the new millenium", Proceedings of the CITC Senai CETIQT World Conference, Rio De Janeiro, Brazil, July.
- Kilduff, PDF (2000) "Strategy, structure and performance in a complex and turbulent business environment: the case of the textile and apparel industries", Proceedings of the Textile Institute World Conference, Manchester UK, April.
  - Huang, CS, Chuter, AJ & Kilduff, PDF (2000) "The experience of the Taiwanese man-made fibre industry in seeking ISO 9000 certification", Proceedings of the the 14<sup>th</sup> Asia Quality Symposium, Taipei, November.
  - Kilduff, PDF (2001) "An Overview of the Competitive Dynamics of the Global Textile and Apparel Industries", Proceedings of the 6<sup>th</sup> Asian Textile Conference, Hong Kong, August.
  - Brown, K and Kilduff, PDF (2004) "The response of the Australian wool industry to the decline of the global wool market", Proceedings of the 83<sup>rd</sup> Textile Institute World Conference, Shanghai, May.
  - Kilduff, PDF, Jiang, HH and Chi, T, (2004) "Transformation in the Chinese Textile and Apparel Industries 1978-2003", Proceedings of the 83<sup>rd</sup> Textile Institute World Conference, Shanghai, May.
  - Kilduff, PDF, Hou Y, & Priestland, C, (2004) "Strategic Transformation in the US Textile and Apparel Sector". Proceedings of the 83<sup>rd</sup> Textile Institute World Conference, Shanghai, May.
  - T. Chi, Kilduff, PDF and Gargeya, VB, (2006) "Business Environment, Competitive Priorities, Supply Chain Structure, and Business Performance in the U.S. Technical Textile Industry: a Preliminary Study". Decision Sciences Institute 37<sup>th</sup> Annual Conference. San Antonio, November 18<sup>th</sup>-21st.
  - Chi, T., Kilduff, PDF. and Gargeya, V. (2007). "Relationships between Business Environment Characteristics, Competitive Priorities, Supply Chain Structures, and Firm Performance: An Application of SEM". International Conference on Advances in Interdisciplinary Statistics and Combinatorics. October, Greensboro, N.C. (Oral presentation paper).

**Peer-reviewed abstracts for papers presented at professional meetings (\_\_\_denotes presenter)**

- McNab, JK, Jackson, KC and Kilduff, PDF (1995) "Regionalism versus Multilateralism and contemporary Issues in Trade: The Global Trading System and What the Future Holds for the Textile and Clothing Industries of the European Union and Asia", 13th Ars Textrina International Conference on Textiles, University of Leeds, July.
- Wang XB and Kilduff, PDF (1996) "Ensuring competitive product design with teamworking co-ordination", 14th Ars Textrina Conference, Lincoln, Nebraska, June.
- Kilduff, PDF, (1997) "Gambling, sex & information technology. The strategic application of information technology in the textile and clothing industries", Textile Institute World Conference, Thessaloniki, Greece, May.
- Kilduff, PDF, Hergeth, H and Goetz, SB (2001) "Beyond Quick Response: In the Digital Age, Will Zero Movement Become the Holy Grail for the Textile and Apparel Industries?" Textile Institute World Conference, Melbourne, Australia, April.
- Kilduff, PDF and Goetz, SB (2001) "The Textile and Apparel Industries - Another Century, Another Paradigm: Developing New Concepts of Industry and Trade in a Virtual World" with Textile Institute World Conference, Melbourne, Australia, April.
- Chi, T and Kilduff, PDF (2005) "Determining Optimal Supply Chain Organization According to Business Environment Conditions and Company Competitive Priorities."

- Abstract accepted for oral presentation at the 2005 International Textile & Apparel Association Annual Meeting, Alexandria, VA, November.
- Brown, K and Kilduff PDF (2005) "Marketing Strategies in the Global Fiber Market: Australian Wool as a Case Study" Kathryn Brown and Peter Kilduff. International Textile & Apparel Association Annual Meeting, Alexandria, VA, November.
  - Chi, T and Kilduff, PDF. (2006) "Determining Optimal Supply Chain Organization in Textiles", AUTEX 2006, Raleigh, NC, June 11-14<sup>th</sup>.
  - Kilduff, PDF and Chi, T (2006) "Long Term Shifts in Patterns of National Trade Specialization in the Textile Complex" Second International Conference on Business, Economics and Management. Yasar University, Izmir, Turkey, June 15th-18th.
  - Su, J; Jones, C; Yan, H; and Kilduff PDF, (2006) "Development of Teaching and Research Linkages with China Through China Study Tours in Textile and Apparel Curriculum" International Textile & Apparel Association Annual Meeting, San Antonio, TX, November.
  - Kilduff, PDF and Chi, T (2007) "Determinants of US Textile and Apparel Imports and Shifting Patterns: An Empirical Investigation using the Gravity Model technique". International Trade and Finance Association, 17th International Conference, Miami, Florida -- May 16th-20th, 2007.
  - Chi, T; Kilduff, PDF; Lim, F., and He, L. L., (2007) "An Empirical Analysis of Trade Competitiveness of the US Technical Textiles utilizing a Gravity Model Framework" International Textile & Apparel Association Annual Meeting, Los Angeles, CA, November.
  - Heimler, R and Kilduff PDF, (2013) Attitudes Regarding Basic Employability Skills Among Graduates of Agricultural Programs: A Pilot Study", Annual NACTA Conference, Blacksburg VA, June. **Outstanding Paper Award.**
  - Heimler, R and Kilduff PDF, (2014) "Graduates of Agricultural Programs Attitudes Regarding Basic Employability Skills", Annual NACTA Conference, Bozeman MT, June.
  - Senanayake, M; Kilduff, PDF; and Grier, W. (2015). Apparel Technology Integration and Development for Purchase Activated Manufacturing. Proceedings of the 8<sup>th</sup> World Conference on Mass Customization, Personalization, and Co-Creation, Oct 21-23, Canada.

**Papers in business periodicals peer-reviewed by specialist Editor (\_\_\_denotes primary or equal authorship)**

- Shaw, CH, Kilduff PDF, and Jackson KC (1992) "The Man-made Fiber Industry in Taiwan", Textile Outlook International, No.41, May, pp34-53, 1992.
  - Chen, KT, Jackson, KC and Kilduff PDF, "Textiles and Clothing in Taiwan: Industry at a Cross-roads" Textile Outlook International, No.63, January, pp138-166, 1996.
  - Kilduff, PDF, "Prospects for the German Man-made Fiber Industry", Technical Textile Markets, No.26, July, pp31-57, 1996.
  - Kilduff, PDF (anon), "Global Economic and Political Turbulence Pushes the Textile and Apparel Industries Towards another Downturn", guest editorial written under editor's name for Textile Outlook International, September 2001.
  - Kilduff, PDF, "Outlook for the US Apparel Industry", Textile Outlook International, September 2001.
- 3. Invited papers presented at professional meetings (\_\_\_denotes presenter)**
- Kilduff, PDF (1992) "Current developments in the textile and clothing industries in Europe", presentation to the Taiwan Textile Federation, Taipei, July.



- Kilduff, PDF (1993) “Current developments in the textile and clothing industries in Europe”, presentation to the Taiwan Textile Federation, Taipei, June.
- Kilduff, PDF (1993) “The dynamics of international competition in the textile and clothing industries”, presentation to the Taiwan Textile Federation, Taipei, June.
- Graham JF and Kilduff, PDF (1994) “The global location of textile and fashion manufacturing and its impact on the European industries”, International Menswear Conference, Huddersfield University, UK, June.
- Kilduff, PDF (1994) “Current developments in the international textile and clothing industries”, Trade Indemnity Seminar, “Profit for growth” for textile financial directors, October.
- Kilduff, PDF (1996) “The dynamics of international competition in textiles and clothing: A global overview”, Textile Institute Weaving Group Conference, York, November.
- Kilduff, PDF (1997) “Strategic intelligence in fragmented industries”, The 1997 International Keynote Seminar, the Confederation of British Leather, London, March.
- Kilduff, PDF (1997) “The dynamics of the global textile and clothing industries”, UK Textile Conference, University of Huddersfield, April.
- Kilduff, PDF (1998) “Best practice in industry support and development frameworks: a study of US textile and apparel, educational, research and trade associations”, Regional Innovation Strategy for Textiles and Clothing Conference, Bradford, UK, June.
- Kilduff, PDF (2000) "The Dynamics of the Global Textile and Apparel Industries", Presentation to the Thai Garment Federation, Bangkok, Thailand, March.
- Kilduff, PDF (2000) “A hitch-hikers guide to the global textile and apparel industries” Conference on Smart Textiles Their Production and Marketing Strategies, NIFT, New Delhi, India, November.
- Kilduff, PDF (2001) “Strategic Transformation in the US Textile and Apparel Industries: A study of Business Dynamics with Forecasts up to 2010”, SEAMS Fall Networking Conference, Cary, October.
- Kilduff, PDF (2001) “Strategic Transformation and Trends in the Global Textile and Apparel Industries”, AATCC International Conference & Exhibition, Greenville, SC, October.
- Kilduff, PDF and Priestland, C (2001) “Strategic Transformation in the US Textile and Apparel Industries”, XXV Mexican Apparel Industry Congress, Los Cabos, Mexico, November.
- Kilduff, PDF (2002) “An Overview of Medical Textile Markets - Trends and Industry Forecast”, IFAI Expo 2002, Industrial Fabrics Association International, Charlotte, NC, October.
- Kilduff PDF (2003) “Dynamics of the Global Textile & Apparel Industries: Patterns of Adjustment and Emerging Strategies” Canadian Textile Institute, Annual Conference, Ottawa, June.
- Kilduff PDF (2003) “Industry Development and The Role of Government: Some Perspectives from Asian, European and American Experiences”, Keynote presentation to the Second International Textile and Clothing Round Table Conference, Shao Xing, China, November.
- Kilduff, PDF (2004) “International Dynamics and Competitive Comparisons” Presentation to the Industry Forum at the Textile Institute World Conference, Shanghai, China, May.
- Kilduff, PDF (2004) “The Dynamics of Globalisation in the Textile and Apparel Industries” Proceedings of the 4<sup>th</sup> Narrow Fabrics Conference, Milan, Italy, September.

- Kilduff, PDF (2004) “Market Status and Growth Opportunities for Hygiene and Healthcare Products” Proceedings of the Fourth International Conference on Safety and Protective Fabrics and Medical Textiles, Pittsburgh, PA, October.
- Kilduff, PDF (2005) “An Assessment of Global Dynamics and Effective Adjustment Strategies for the Australian TCF Sector in a Liberalised Textile/ Apparel Trading Environment.” Proceedings of the Future Directions in Global Fibre and Textile Industries, International Fiber Centre, Melbourne, Australia, March.
- Kilduff, PDF, (2006) “Strategic Implications of Current Developments in Global Apparel Markets” EBSO(Aegean Region Chamber of Industry) National Textile and Apparel Symposium, Izmir, Turkey, June 2006.
- Kilduff, PDF and Chi, T, (2006) “Relationships Between Business Environment Characteristics, Competitive Priorities, Supply Chain Structure, and Business Performance in the US Industrial Textile Industry” IFAI Expo, ATME Distinguished Speakers Luncheon, MegaTex, Atlanta, GA, October 31<sup>st</sup> – November 2<sup>nd</sup>.
- Chi, T and Kilduff, PDF (2006) “Market Segmentation and Growth Opportunities for Medical Textiles & Healthcare Products”, , IFAI (Industrial Fabrics Association International) World Expo, Medical Textiles Symposium, Atlanta, GA, October 31<sup>st</sup>.
- Liu, H. Chi, T and Kilduff, PDF and Leonas, K., (2008) “Global Market Trends and Opportunities for Medical Textiles & Healthcare Products”, IFAI (Industrial Fabrics Association International) World Expo, Medical Textiles Symposium, Charlotte, NC.
- Kilduff, PDF. (2011) “Current Developments in the US Apparel and Textile Sectors” Keynote Presentation to the “Summit Forum on the Global Textile Economy”, Dong Hua University, Shanghai, June 22<sup>nd</sup>.

#### 4. Conference papers summarized and re-published in Textile Asia

- Kilduff, PDF, (2000) "Textiles in a New Environment", Textile Asia, Vol.31, No.7, pp44-8.
- Kilduff, PDF, (2002) “Dynamics of the World Textile and Clothing Industries.” Textile Asia, 33, No. 7: 32-36, July.
- Kilduff, PDF, Hou, Y and Priestland C, (2004) “US Companies Confront Change”, Textile Asia, Vol. 35, No. 9, September.
- Kilduff, PDF (2005) Industry on the Move, Textile Asia, Vol. 36, No. 1, January, <http://www.textileasia-businesspress.com/2005jan/>

#### 5. Technical reports (\_\_\_denotes primary or equal authorship)

##### Special business reports:

- Graham, JF and Kilduff PDF, (1994) “ Textiles and Clothing in China: Current Developments and Future Prospects”, The Financial Times, Financial Times Management Reports, London, October, 127 pages.
- Graham, JF and Kilduff PDF, (1994) “Textiles and Clothing in India: Current Developments and Future Prospects” The Financial Times, Financial Times Management Reports, London, December, 100 pages.

##### Technical reports refereed by an industry panel:

- Graham, JF and Kilduff PDF, “Textiles and Clothing in Czechoslovakia, Hungary and Poland: An Analysis of Change and Competitor Activity”, The Textile Intelligence Centre, Leeds University, September 1992, 30 pages; ISBN 1 901433 00 5, Whitaker, Farnham, UK.

- Graham, JF and Kilduff PDF, “The Japanese Textile and Clothing Industries: A Strategic Perspective”, The Textile Intelligence Centre, Leeds University, February 1993, 35 pages; ISBN 1 901433 01 3, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “Chargeurs: An Analysis of Their Textile Involvement”, The Textile Intelligence Centre, Leeds University, May 1993, 20 pages; ISBN 1 901433 02 1, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “An Analysis of the Textile Industry in the Biella Region of Italy”, The Textile Intelligence Centre, Leeds University, May 1993, 25 pages; ISBN 1 901433 03 X, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “China: A Review of Current Developments in the Textile and Clothing Industries”, The Textile Intelligence Centre, Leeds University, September 1993, 88 pages; ISBN 1 901433 04 8, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “A Review of the Current Developments in the Indian Textile and Clothing Industries”, The Textile Intelligence Centre, Leeds University, January 1994, 79 pages; ISBN 1 901433 05 6, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “A Perspective on Current Developments in the German Textile and Clothing Industries”, The Textile Intelligence Centre, Leeds University, April 1994, 80 pages; ISBN 1 901433 06 4, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “Current Developments in UK Retailing and their Implications for Domestic Textile and Clothing Manufacturers”, The Textile Intelligence Centre, Leeds University, October 1994, 67 pages ISBN 1 901433 07 2, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “Current Developments in European Retailing and their Implications for Domestic Textile and Clothing Manufacturers”, The Textile Intelligence Centre, Leeds University, January 1995, 40 pages; ISBN 1 901433 08 0, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “Issues in Supply Chain Management in the Textile and Clothing Industries”, The Textile Intelligence Centre, Leeds University, April 1995, 30 pages ISBN 1 901433 09 9, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “A Strategic Perspective on Current Developments in the Japanese Textile and Apparel Industries”, The Textile Intelligence Centre, Leeds University, July 1995, 30 pages; ISBN 1 901433 10 2, Whitaker, Farnham, UK.
- Graham, JF and Kilduff PDF, “Current Developments in the Textile and Clothing Industries of Eastern Europe and the CIS.” The Textile Intelligence Centre, Leeds University, January 1996, 200 pages; ISBN 1 901433 11 X, Whitaker, Farnham, UK.
- Kilduff, PDF, Graham JF, Hart D and McNab, J, “Current Developments in the Textile and Clothing Industries of Germany.” The Textile Intelligence Centre, Leeds University, April 1996, 160 pages, ISBN 1 901433 12 9, Whitaker, Farnham, UK.
- Wang, XB and Kilduff PDF, “An International Survey of Current Academic Research into Textile and Clothing Management.” The Textile Intelligence Centre, Leeds University, May 1996, 45 pages; ISBN 1 901433 13 7, Whitaker, Farnham, UK.
- Kilduff, PDF, McNab, J and Graham, JF, “Current Developments in the Textile and Clothing Industries of South East Asia.” The Textile Intelligence Centre, Leeds University, July 1996, 200 pages; ISBN 1 901433 14 5, Whitaker, Farnham, UK.
- Kilduff, PDF, McNab, J, Brooke P and Graham, JF, “An Analysis of International Strategic Market Opportunities for UK Textile and Clothing Businesses.” The Textile Intelligence Centre, Leeds University, October 1996, 119 pages; ISBN 1 901433 15 3, Whitaker, Farnham, UK.

- Kilduff, PDF, Brooke P and Graham, JF, “A Review of the Competitive Dynamics of the UK Textile and Apparel Industries.” The Textile Intelligence Centre, Leeds University, January 1997, 120 pages: ISBN 1 901433 16 1, Whitaker, Farnham, UK.
- Brooke P, Kilduff, PDF, and Graham, JF, “A Review of Current Issues in UK Apparel Retailing.” The Textile Intelligence Centre, Leeds University, April 1997, 100 pages; ISBN 1 901433 17 X, Whitaker, Farnham, UK.
- Kilduff, PDF and Priestland, C, “Strategic Transformation in the US Textile and Apparel Industries: a Study of Business Dynamics with Forecasts up to 2010” Textile and Apparel Business Intelligence Consortium, NC State University, Raleigh, May 2001, 142 pages.

Other Technical Reports

- Brooke P, and Kilduff, PDF, (1997) “An executive Opinion Survey to Determine Competitive Challenges faced and to Identify Company Needs in the Textile and Clothing Industry” The Textile Intelligence Centre, Leeds University, July, 22 pages.
- Jeffery RC, and Kilduff, PDF, (1998) “How to Harness Information Technology Successfully in Your Business. A Guide for Senior Managers”, The Textile Intelligence Centre, Leeds University, January, 71 pages; ISBN 1 901433 19.
- Kilduff, PDF, (1998) “Towards best practice in industry support and development frameworks: a study of US textile and apparel, educational, research and trade associations”, Report on behalf of the (UK) Department of Trade & Industry on a Study Mission to the USA, The Textile Intelligence Centre, Leeds, July, 50 pages.
- Kilduff, PDF, (1998) “ How Information Technology can Transform Business”, in Apparel, Footwear and Textile Industries in Practice Guide, Improving Business Processes through Intelligent Information Management, Published by JBA Consulting and Kurt Salmon Associates, UK, November.
- Kilduff, PDF, (1998) “The IT Factor”, in [www.just-style.com](http://www.just-style.com), 9<sup>th</sup> December.
- Kilduff, PDF, “How Information Technology can Transform Business: Part 2”, in [www.just-style.com](http://www.just-style.com), 19<sup>th</sup> Jan 1999.
- Karpe, Y, Hodge, G, Oxenham, WJ, Cahill, N & Kilduff, PDF, “Information Engineering” ITS Textile Leader, April 2000.
- Bruce, M, Daly, L, Kilduff, PDF and Hines A, (2000) “Opportunities and Strategies for Using E-Commerce in the Textile & Apparel Industries: Learning from the US Experience”, Report on behalf of the (UK) Department of Trade & Industry on a Study Mission to the USA, British Apparel & Textile Confederation, London, July, 80 pages. [http://www.industryforum.net/FileUploads/Opportunities\\_Strategies\\_for\\_using\\_eCommerce\\_in\\_the\\_Textile\\_Apparel\\_industries.doc](http://www.industryforum.net/FileUploads/Opportunities_Strategies_for_using_eCommerce_in_the_Textile_Apparel_industries.doc)
- Chang W and Kilduff PDF (2002) ”The US Market for Technical Textiles” Small Business and Technology Development Center, Raleigh, NC, May.
- Kilduff, PDF (2003) “Results of a Survey of Textile Executives' Opinions Regarding Key Issues Affecting the Development of their Companies” Southern Textile News, March.

II. RESEARCH GRANTS AND CONTRACTS

**A. Grant proposals awarded**

<b>Title</b>	<b>Sponsor</b>	<b>Date</b>	<b>Amount</b>
Textile Intelligence Center	Industry Consortium/ Barclays Bank/ DTI	Jun 1992 – Feb 1998	\$440,000
Enabling strategic change in small / medium-sized textile and clothing manufacturers	European Commission	Sep 95 – Jan 98	\$1,055,000

Strategic framework for the textile and clothing industries.	UK Dept of Trade & Industry	Mar '97 - Jun '98	\$65,000
Overseas Trade Export Marketing Study Mission to the United States.	UK Dept. of Trade & Industry	Mar '98 – Jul '98	\$60,000
Textile/Apparel Business Intelligence Consortium	Corporate sponsored research projects	Aug 99 – Jul 02	\$74,000
Textile/Apparel Business Intelligence Consortium - “Strategic Transformation in the US Textile & Apparel Industries” (incl. \$16k of report sales)	North Carolina Textile Foundation	Sep '99 – Jul '02	\$66,000
Textile/Apparel Business Intelligence Consortium	Corporate sponsored research projects	Jan 00 – Jul 02	\$74,000
Strategic Analysis of the US Market for Nylon and Polyester Yarns	Universal Fiber Systems	May 2003	\$15,000
Relationship Between Business Environment Characteristics, Competitive Priorities, Supply Chain Structure, and Business Performance in the US Technical Textile Industry	Industrial Fabrics Foundation	May 2005	\$12,000
“Market Research and Implementation Strategy for the Development of Home Textile Markets in the US and China”	Shanghai Textile Research Institute	September 2006	\$40,000
“Assessment of the Global Fabric Coloration Market”	Colorep LLC	March 2007	\$15,000
Developing a strategic framework to support the LA apparel industry.	LA DWP	Spring 2010	\$25,000
“An Empirical Study of Consumer Substitution Processes for High Quality California Cottons in the U.S. Sportswear Market”	Calif. Dept of Agric, Agricultural Research Initiative / Hai Tian Textile Group	January 2008	\$36,000
“Attitudes of Graduates, Faculty, and Employers Regarding Skills and Competencies Needed for Entry-Level Employment in the California Agricultural Sector. Phase 1: Students attitudes.” Co-PI	Calif. Dept of Agric, Agricultural Research Initiative	February 2011	\$11,940
Focus on the Future (21 <sup>st</sup> century college to career skills for Hispanic students in agriculture programs). Co-PI	USDA Hispanic Serving Institution Education Program	2011	\$289,000
“Attitudes of Graduates, Faculty, and Employers Regarding Skills and Competencies Needed for Entry-Level Employment in the California Agricultural Sector. Phase 2: faculty attitudes.” Co-PI	Calif. Dept of Agric, Agricultural Research Initiative	2013	\$11,940
“Attitudes of Graduates, Faculty, and Employers Regarding Skills and Competencies Needed for Entry-Level Employment in the California Agricultural Sector. Phase 3: employer attitudes.” Co-PI	Calif. Dept of Agric, Agricultural Research Initiative	2014	\$16,857
Sowing the Seeds for a Multicultural 21st Century Workforce in the US Agriculture Sector.	USDA Non-Land Grant Colleges of Agric: Educational Scholarship Program	2015	\$146,781

**Other Contract Research**

<b>Topic</b>	<b>Sponsor</b>	<b>Date</b>	<b>Amount</b>
Burlington Industries analysis	Fairchild Corporation	Jul 2003	\$16,000
International competitiveness research	Industry Canada	Sep 2003	\$20,000
International business environment research	Datacolor International	May 2004	\$12,000
International business environment scan	Shanghai Municipal Govt. Industry Bureau	Jul 2004	\$6,000
International market research	Datacolor International	Apr 2005	\$15,000
International business environment scan	Shanghai Municipal Govt. Industry Bureau	Jun 2006	\$6,000
Industry sector study.	Los Angeles Dept. of Water & Power	September 2010	\$25,000

**B. Research income from competitive internal funds**

<b>Title</b>	<b>Sponsor</b>	<b>Date</b>	<b>Amount</b>
Textile Intelligence Center start-up funding	Leeds University	1992/93 – 1993/94	\$42,000
Determinants of US Textile and Apparel Imports and Shifting Patterns: An Empirical Investigation using the Gravity Model technique	Cal Poly Pomona	2007	\$3,000

**C. Research Centers and Consortia**

The Textile Intelligence Centre (TIC), Leeds University

- Established in July 1992 to provide a strategic intelligence resource to the UK textile and apparel industries.
- The TIC was set-up as a not-for-profit organization to undertake research into competitive issues on behalf of sponsoring organizations. Permanent members included 9 textile and clothing companies, the UK Department of Trade and Industry (DTI) and Barclays Bank.
- In addition, special projects were undertaken for national and international clients.
- In 1995 and 1997 the TIC successfully bid for institutional (EU and UK government) funding which extended its commercially sponsored activities.
- The TIC was wound down and closed in 1998 following my resignation from the University.

Textile Apparel Business Intelligence Consortium, (TABIC) NC State University

- Seed funding was obtained from the North Carolina Textile Foundation (NCTF) in fall 1999 to produce a report that would assist understanding of strategic change in the industries. The report was distributed to NCTF members in Fall 2000 and then sold nationally and internationally – primarily to universities with textile and apparel programs.
- A consortium led by the American Textile Manufacturers Institute, the American Fiber Manufacturer’s Association and the National Cotton Council was formed to support TABIC but dissolved when ATMI imploded and eventually disappeared in 2002.
- Special projects performed for a number of clients between Fall 2000 and Summer 2002.

List of Research Sponsors 1989-2011

Organizations

Agricultural Research Initiative  
 Allied Textile Companies  
 Assatex

Description

California State Government scheme  
 UK multinational textile group  
 Small US knitted fabric manufacturer

Barclays Bank plc	Major UK clearing bank
Batoyl Ltd	Small UK textile lubricants manufacturer
Bayer AG	German fiber multinational
Benson Turner Ltd	Medium-sized UK textile group
B Berwin Ltd	Medium-sized UK menswear manufacturer
British Apparel and Textile Confederation	Principal for DTI sponsored project
BSN Medical	Multinational medical textile manufacturer
Business Link Bradford & District	Principal for DTI sponsored project
Celanese	Large US fiber group
Colorep	Medium sized US technology group
Danish Environmental Protection Agency	Principal for an EU sponsored project
Dawson International plc	Multinational (UK) textile group
Decata Consulting	International (UK) consulting group
UK Department of Trade and Industry	UK Government agency
Danish Environmental Protection Agency	Principal for European Commission project
Drummond Group plc	Medium-sized UK textile group
Hong Kong Trade Development Center	Hong Kong government agency
IJ Dewhirst plc	Large UK clothing group
Industry Canada	Canadian government industry department
Extrusion Systems Ltd	Small fiber equipment producer
Fairchild Corporation	Franco-US industrial conglomerate
Fongs Industries Company Ltd	Large HK dyeing machinery manufacturer
Greenwoods Menswear	Medium-sized UK menswear chain
Government Office for Yorkshire and the Humber	Regional UK Government Office
Hai Tian Textile	Medium-sized Chinese apparel group
Hield Brothers	Medium-sized UK textile group
ICI Polyester	UK fiber intermediates multinational
Industrial Fabrics Foundation	US-based trade association charitable arm
H Jerome & Sons Holdings	Medium-sized UK textile group
Klas	Turkish management development company
Laxton Crawford	Small UK textile group
Los Angeles Dept of Water & Power	LA City Utility Agency
Lovell White Durrant	Large UK law firm
Leeds Group plc	UK multinational textile group
Milliken Industries	Large US textile group
Parkland Group	Medium-sized UK textile group
Parkdale Mills	Large US textile group
Premiere Fibers	Medium-sized US fiber company
Reliance Industries	Large Indian fiber group
Rotherham Chamber of Commerce	Local UK training and enterprise group
Shanghai Municipal Government	Local government agency
Shanghai Textile Research Institute	Large textile group research agency
Shell Lubricants UK	UK multinational lubricants group
Small Business & Technology Development Center	North Carolina State Agency
Toray Industries	Large Japanese fiber and textile group
Total Research	Research consultancy group
USDA	US federal agency
Benjamin Vickers & Sons Ltd	Medium-sized textile lubricant manufacturer
Yorklyde plc	Medium-sized UK textile group

**A. Guest Lectures (not listed elsewhere)**

- “The dynamics of international competition in the textile and clothing industries”, presentation to the Textile Institute, Leeds Section, Annual General Meeting, February. 1990.
- “The dynamics of the global textile and clothing industries”, lecture at Feng Chia University, Taiwan, July 1991.

- “The dynamics of international competition in the textile and clothing industries”, Hong Kong Polytechnic, Institute of Textiles and Clothing, July 1991.
  - “How to Develop Your Business Internationally” Urbach Hacker Young, group world conference, London, September 1992.
  - “The dynamics of the global textile industry”, Fachhochschule Niederrhein, Munchengladbach, Germany, November 1997
  - “Evolutionary patterns of national textile and apparel industries” Ecole Superior Ensait, Roubaix, France, November 1997
  - “The dynamics of the global textile industry”, Ecole Superior Ensait, Roubaix, France, November 1997
  - “Evolutionary patterns of national textile and apparel industries” Fachhochschule Niederrhein, Munchengladbach, Germany, November 1997.
  - “The Strategic Role of Information Technology” presentation to the Taiwan Textile Federation, Taipei, December 1997.
  - “Strategic Responses and Emerging Strategies and Organisational Structures” presentation to the Taiwan Textile Federation, Taipei, December 1997.
  - “Dynamics of the Global Textile and Apparel Industries” presentation to the Taiwan Textile Federation, Taipei, December 1997.
  - “The strategic impact of information technologies on the textile and apparel industries”, Bretton Hall College, Textile and Apparel Industry Breakfast Seminar Series, July 1998.
  - “Ways To Go Forward – A Vision For The Future” Southern Textile Association, Winter Technical Meeting, Charlotte, NC, January, 2003.
  - “Strategic Transformation in the US Textile and Apparel Industries” Presentation to the faculty and students of Zhejiang Institute of Science and Technology, Hangzhou, March, 2003.
  - “Strategic Transformation in the US Textile and Apparel Industries” Presentation to the faculty and students of the Glorious Sun School of Business, Donghua University, Shanghai, March, 2003.
  - “Dynamics of the Global Textile & Apparel Industries: Patterns of Adjustment and Emerging Strategies.” Canadian Textile Institute, Annual Conference, Ottawa, June, 2003.
  - “Beyond Quick Response: In the Digital Age, Will Zero Movement Become the Ultimate Goal for the Textile and Clothing Industries?” presentation to the students and faculty of the Business School, Zhejiang Institute of Science & Technology, Hangzhou, China, November, 2003.
  - “The Dynamics of National Textile and Clothing Industries and Their Markets: Observations on Patterns of Evolution and Future Prospects.” Presentation to the Glorious Sun School of Business and Management, Donghua University, Shanghai, China, November, 2003.
  - “China’s Textile & Apparel Industries: Strategies to Succeed in Tomorrow’s Global Marketplace” Presentation to the Glorious Sun School of Business and Management, Donghua University, Shanghai, China, June, 2006.
  - Kilduff, PDF and Chi, T (2006) “Long Term Shifts in Patterns of National Trade Specialization in the Textile Complex” Presentation to the Glorious Sun School of Business and Management, Donghua University, Shanghai, China, June, 2006.
  -
- B. Invited presentations to industry (not listed elsewhere)**
- Kilduff, PDF (2000) "Strategic Change in Textiles", seminar discussion with the Thai Weavers Association and the Thai Dyeing Association, Bangkok, Thailand, March.
  - Kilduff, PDF & Cassill, N (2001) “Trade Research at NC State College of Textiles”, NCSU/ NC Commerce Dept Textile Trade Symposium, Raleigh, October.



- Kilduff, PDF (2001) “Strategic Transformation in the Global Textile and Apparel Industries” Clariant Corp., Archroma Seminar, Charlotte, NC, December.
- Kilduff, PDF (2002) “Development in medical textile markets” Seminar for the executive management of Omnova Solutions Inc, Chester, SC. December.
- Kilduff, PDF (2003) “Ways To Go Forward – A Vision For The Future” Southern Textile Association, Winter Technical Meeting, Charlotte, January.
- Kilduff PDF (2003) “The Evolution of Competitive Strategies, Organisational Structures and Business Relationships in Increasingly Complex and Turbulent Textile and Apparel Business Environments”, A seminar presentation to the faculty of the Zhejiang Institute of Science and Technology, Hangzhou, March.
- Kilduff, PDF (2004) “International Developments in Textile and Apparel Trade” Seminar for the Shanghai WTO Affairs Consultation Center, Shanghai, China, May 2004.
- Kilduff, PDF, (2004) “Emerging Issues in the Global Textile and Apparel Industries” Presentation to the Annual Meeting of Datacolor International, Lawrenceville, NJ, November 2004.
- “Shanghai’s Textile & Apparel Industries: Strategies to Succeed in Tomorrow’s Global Marketplace” Presentation to the Shanghai Textile Group, June 2006.
- “Shanghai’s Textile & Apparel Industries: Strategies to Succeed in Tomorrow’s Global Marketplace” Presentation to the Shanghai Textile Research Institute, June 2006.

### **C. Honors and awards from profession**

- UK government prize for research linkages with industry, 1997
- Led a UK government-sponsored industry study mission to the USA in March 1998.
- Invited Member of the Textile Competitiveness Committee, NC Department of Commerce, 2001- 2006.
- Guest Professor, Glorious Sun School of Business, Dong Hua University, Shanghai, China, November 2003.
- Director of Education for US sewn products trade association SEAMS, August 2005-2007.
- Emerald literati Network Outstanding Paper Nomination 2006. Kilduff, PDF (2005) “Patterns of strategic adjustment in the US textile and apparel industries since 1979.” Journal of Fashion Marketing & Management, Vol 9, No. 2, 2005.
- Emerald literati Network Outstanding Paper Award 2007. Kilduff, PDF and Chi, T. (2006) “Longitudinal Patterns of Comparative Advantage in the Textile Complex” Journal of Fashion Marketing & Management, 10, (2).
- Outstanding Paper Award: Heimler, R. & Kilduff, P. (2013) “Graduates of Agricultural Programs Attitudes Regarding Basic Employability Skills: A Pilot Study.” Annual NACTA Conference, Blacksburg, VA.

## **ACHIEVEMENTS IN INSTRUCTION**

### **I. COURSES TAUGHT**

#### **Cal Poly Pomona**

- AG 100 Orientation to College
- AMM 357 Apparel Importing & Exporting
- AMM 441 Pre-Internship
- AMM 442 Internship
- AMM 443A Apparel Market Research & Reporting
- AMM 453 Apparel Sourcing and Supply Chain Management

- AMM 455A Apparel Retail Simulation Activity
- AMM 461 Senior Project I
- AMM 462 Senior Project II
- AMM 457 Dynamics of the Global Apparel Sector

#### **UNC Greensboro**

- CRS 463 Global Sourcing of Tex Products
- CRS 481 Contemporary Issues in TPM
- CRS 530 Economics Tex & Apparel Complex
- CRS 530 Economics Tex & Apparel Complex
- CRS 660 International Textile Products Marketing
- TDM 261 Intro to Apparel Merchandising
- TDM 482 Special Problems in TDM
- TDM 530 Economics Tex & Apparel Complex
- TDM 560 Textile Products Marketing
- TDM 687 Readings in Textile Products Marketing
- TDM 699 Masters Thesis
- TDM 790 Independent Doctoral Research

#### **NC State University**

- TAM (BUS) 482 Textile Marketing Management
- TAM (BUS) 382 Princip. of Soft Goods Marketing
- TAM 491 Special Topics in Textile & Apparel Mgt
- TTM (BUS) 585 Market Research in Textiles
- TTM 601/801 Seminar
- TAM 497 Textile Management Senior Project
- TAM 591 Sp. Studies in Tex & Apparel Tech. & Mgt
- TAM 589C Sp. Stud. in Global Tex & Apparel Mktg
- TT 105P Introduction to Textile Technology

#### Distance learning (NCSU)

- TTM 561

#### **University of Leeds**

- Senior Economics of the Global Textile Industry
- Senior Operations Management
- Senior Textile Management Project Workshop
- Freshman Information Technology
- Senior European Tex and Clothing Industries
- Graduate Dynamics of Int. Competition in the Tex. and Clothing Industries
- Graduate Tex. & Clothing Industries in N. America

#### Supervision of Theses and Dissertations

##### ***Doctor of Philosophy***

- Shaw, CH. "An Analysis of the Man-made Fibre, Textile and Clothing Industries in Taiwan 1945-1990", University of Leeds, UK, 1993.
- Yasuda, H. "An analysis of the responses of the United States Textile and Apparel Industries to Changes in the Business Environment Between 1960 and 1992", University of Leeds, UK, 1994.
- Chen, KT. "A strategic Analysis of the Textile Industry in Taiwan with Special Reference to Relocation and Upgrading", University of Leeds, UK, 1995.

- Wang, XB. "Concurrent Design Towards Global Textile/ Apparel development", University of Leeds, UK, 1996.
- Huang, CS. "The Implementation of ISO 9000 in the UK and Taiwanese Textile Industries", University of Leeds, UK, 1998.
- Jiang, HH. "An Analysis of the Evolution of the Chinese Textile and Clothing Industries and Distribution Systems Since 1979", University of Leeds, UK, 1998.
- May-Plumlee, T "Modeling apparel product development using consumer purchase criteria", NCSU, 1999
- LePechoux, B "Linking marketing design and creativity" NCSU, 1999.
- Altinoz, C "Supplier selection in textiles: a fuzzy approach", NCSU, 2001.
- Kuehnen, S "Model-based conceptual communication design in co-ordination systems", NCSU, 2001.
- Lee, EK, "Creation of a casual index based on habit stocks and general social behaviors". NCSU, 2001
- Zhao, Y "Differences Explained by Culture and Lifestyle in Decision-Making Process of Chinese and American Young Adults" UNCG, 2004.
- Hou, Y "Service Quality of Online Apparel retailers and Its Impact on Customer Satisfaction, Customer trust and Customer Loyalty" UNC Greensboro, 2005.
- Chi, T "A Study of the Relationships Between Business Environment Characteristics, Competitive Priorities, Supply Chain Structures, and Firm Performance in the U.S. Technical Textile Industry". UNC Greensboro, 2006.

#### ***Master of Philosophy***

- Rudham, JJ. "The Application and Impact of Information Technology in Retailing with Specific Reference to the Apparel Manufacturing Interface", University of Leeds, UK, 1994.
- McNab, JK. "Current Developments in Textile and Clothing Trade in Selected EU and Asian Countries" University of Leeds, UK, 1996.

#### ***Master of Science***

- Raptis, G. "Clothing Retailing and Retail Strategies in W Europe", University of Leeds, UK 1996.
- Jingjit, P. "The Development of Consumer markets and Retail Distribution for Textiles and Clothing in ASEAN Countries", University of Leeds, UK 1996.
- Cumen, B, "An analysis of the textile and apparel industries in Turkey", University of Leeds, UK 1996.
- Fillipas, D. "A review of organisational structuring with specific reference to the textile industry" University of Leeds, UK, 1997.
- Tanriverdi, M "An analysis of current developments and future prospects for EU apparel retailing", University of Leeds, UK, 1997.
- Wang, M. " Supply chain strategies for local market development in China, with specific reference to foreign branded apparel" NC State University, 1999.
- Cagle, C. "The development of electronic commerce in the apparel industry", NC State University, 2000.
- Goetz, S. "Impact of Information Technology on New Product Development in the Textile and Apparel Supply Chain with Specific Reference to Textile Design and Direct Digital Printing onto Fabric", NC State University, 2000.
- Garg, A, "Assessing the value of agent certification in global sourcing: an exploratory study", NCSU 2001

- McRee A, “An Analysis of Sub-Saharan Africa’s Textile and Apparel Industries”, NCSU, 2002.
- Chang, W. “An analysis of the US technical textile industry and markets”, NC State University, 2002.
- Gupta, D. “An analysis of supply chain disruptions” NC State University, 2003.
- Zhao, X. “An analysis of comparative advantage for China's textile and apparel industries”, UNCG, 2004.
- Brown, K “A Review of the Effects of Australian Wool Marketing Initiatives on the Associations Between Selected Variables in the Global Wool Market”. UNC Greensboro, 2005.

## II. TEACHING AWARDS AND RECOGNITION

- **Nominations for outstanding teacher award**
  - UNCG College of Human Environmental Sciences 2003/04
  - UNCG College of Human Environmental Sciences 2004/05
- **Invitations to teach at other campuses**

### Special Lecture Presentations to students and faculty:

- “The dynamics of the global textile and clothing industries”, lecture at Feng Chia University, Taiwan, July 1991.
- “The dynamics of international competition in the textile and clothing industries”, Hong Kong Polytechnic, Institute of Textiles and Clothing, July 1991.
- “The dynamics of the global textile industry”, Fachhochschule Niederrhein, Munchengladbach, Germany, November 1997
- “Evolutionary patterns of national textile and apparel industries” Ecole Superior Ensait, Roubaix, France, November 1997
- “The dynamics of the global textile industry”, Ecole Superior Ensait, Roubaix, France, November 1997
- “Evolutionary patterns of national textile and apparel industries” Fachhochschule Niederrhein, Munchengladbach, Germany, November 1997.
- “Strategic Transformation in the US Textile and Apparel Industries” Presentation to the faculty and students of Zhejiang Institute of Science and Technology, Hangzhou, March, 2003.
- “Strategic Transformation in the US Textile and Apparel Industries” Presentation to the faculty and students of the Glorious Sun School of Business, Donghua University, Shanghai, March, 2003.
- “Beyond Quick Response: In the Digital Age, Will Zero Movement Become the Ultimate Goal for the Textile and Clothing Industries?” presentation to the students and faculty of the Business School, Zhejiang Institute of Science & Technology, Hangzhou, China, November, 2003.
- “The Dynamics of National Textile and Clothing Industries and Their Markets: Observations on Patterns of Evolution and Future Prospects.” Presentation to the Glorious Sun School of Business and Management, Donghua University, Shanghai, China, November, 2003.

### Courses Taught

Rajamangala Institute of Technology, Bangkok, Thailand

Postgraduate Diploma Program – “International Marketing in the Textile and Apparel Industries”

Spring and Fall 2000.

ITESM-Tecnologico de Monterrey, Campus Laguna, Torreon, Mexico  
Graduate Diploma Program - "Textile and Apparel Supply Chains in a Digital and Global Environment" Spring 2001

Other

Guest Professor –Glorious Sun School of Business, DongHua University, Shanghai, China. since November 2003.

External Examiner, Department of Textiles, University of Manchester Institute of Science & Technology, Manchester, England (1998-2001)

### III. PROFESSIONAL DEVELOPMENT

#### Grants

Source:	ALCOA
Project Title:	ALCOA Teaching Fellows program
Project Objectives:	Development of Improved Learning Methodologies for Textile Management Education
Project Value:	\$1,500
Project Duration	Spring - Summer 1999
Source:	US Department of Education FIPSE
Project Title:	Transatlantic Textile Network
Project Objectives:	Student and academic exchanges with Universities and companies
Project Value:	\$170,000
Project Duration	Fall 2000 – Summer 2003
Source	NC State University
Project Title	Establishing research / educational links with Sub-Saharan Africa
Project Value	2001 –2002
Project Duration	\$10,000
Source:	UNC Greensboro / Kohler Foundation International Funds
Role:	PI
Project Title:	Establishing research / educational links with China
Project Objectives:	Preliminary visit with Chinese institutions to discuss linkages
Project Value:	\$1,000
Project Duration	Fall 2002 – Spring 2003
Source:	Target Corporation Campus Grant
Role:	PI
Project Title:	Retail Leadership Development Program
Project Objectives:	Establishment of a leadership and professional development program for AMM juniors and seniors
Project Value:	\$7,500
Project Duration	Fall 2008 – Fall 2009
Source:	USDA
Project Title:	Focus on the Future: Cultivating a Multicultural 21st Century Workforce in the U.S. Agricultural Sector

Role: Co-PI  
 Project Value: \$292,000  
 Project Duration: Fall 2011 – Fall 2014.

**ACHIEVEMENTS IN SERVICE**

**• UNIVERSITY SERVICE**

**Summary of Committee Memberships**

Years	University Committees	College/ School Committees	Department/ Program Committees
<b>Cal Poly</b>	Academic Affairs Strategic Planning & Evaluation (Co-chair) - since 2011 Senate Executive Committee 2012-2015 College of Ag Senator 2011-2015 Academic Senate (Vice Chair) 2012-2014 Academic Affairs (Chair) 2011-2012 Faculty Affairs 2007-2010 Finance and Budget 2009-2010 WASC accreditation (sub-com) Dean of Science Performance Review Dean of Ag Search (Chair)	College Leadership Advising Strategy	General Purpose (chair) Faculty Search (chair) AMM Advisory Board (chair)
<b>UNCG</b>	Instructional Grant Review Bookstore	Faculty Council Teaching Excellence	Web Curriculum Graduate Faculty Faculty Search Planning
<b>NCSU</b>	Connecting In North Carolina Diversity	Finance task force Website/ ecommerce Development Team Research	Web Courses and Curriculum
<b>LEEDS</b>	Faculty Board		Textile Management - Program Director Department Strategy Task Force (Chair) Textile Management Curriculum (Co-Chair) Faculty

**• SERVICE TO THE DISCIPLINE**

Appointment or election as officer in professional organization

- Member of the Textile Institute panel on textile education and training issues (1989-1991).

Jurying for granting agencies

- Hong Kong Department of Education, University Grants Committee, referee for research proposals in management (1999 - present).

Appointments to editorial/ review boards

- Journal of Textile Institute, 1997- present
- Journal of New Product Development & Innovation Management 1999 - 2001
- Journal of Textile and Apparel Technology & Management 2000 - 2005

III. SERVICE TO EXTERNAL COMMUNITIES

•Linkages with Industry

- The Textile and Clothing Network (TCN) Yorkshire, UK 1996-1998. A technology diffusion and business networking initiative that embraced:
  - 50 companies, in four 'industry clusters'
  - 250 participated in associated seminars and conferences.
- In 1997/98 a lead partner in the UK government's program - Regional Innovation Strategy - for the Yorkshire textile and clothing Industries.
- In 1998 led a UK government-sponsored study mission to the US to investigate best practices in industry support networking.
- In 1997/ 98 prepared a report for the regional government agency laying out a framework for textile and apparel industry development agenda.
- In 2001-2003 active with the NC Textile Competitiveness Committee in pursuing a development agenda for the NC textile and clothing industries.
- Periodic seminars and formal presentations to national industry associations (UK, Taiwan, Thailand, China, India, Australia, Canada, and the US) and to leading companies such as Clariant, Omnova Solutions, and Datacolor International.

•Conducting directed or contracted research

Studies have included projects for large international corporations, such as:

- Urbach Hacker Young, a London-based international financial group;
- Milliken Industries, a leading US textile manufacturer,
- Datacolor, a US-Swiss multinational color technology and management company.
- Fairchild Corporation, a French-US multinational conglomerate

Government agencies studies performed for include:

- the Hong Kong Trade Development Centre, the export arm of the Hong Kong industry department;
- the Shanghai Municipal Government Industry Bureau, with responsibilities over industrial and trade development;
- Industry Canada, the equivalent of the US Department of Commerce.

•Conducting program, policy, and personnel evaluation research for other institutions and agencies

- University of Birmingham (UK), Development Administration Group: member of the advisory panel on textiles and industrial development (1994-1996).

•Consulting and providing technical assistance to public and private organizations

- Conducting public policy analyses for local, national, and international, governmental or nongovernmental, agencies

- Member of the Textile Competitiveness Committee, NC Department of Commerce, 2001 – present.
- A board director of the Leeds Clothing and Textile Centre (1996-1997).

•Serving as an expert witness

On behalf of Lovell White Durrant acting for the defendant - a study of the European market for textured polyester yarn.

On behalf of US acetate yarn manufacturers who were contesting a USITC decision to drop tariffs on viscose rayon – an investigation into inter fiber substitution between viscose and acetate rayon.

•Serving as an expert for the press and other media

National Public Radio; WXII Channel 12 TV news; The Wall Street Journal; The Washington Post; The Associated Press agency; Winston Salem Journal; Bizjournal; Charlotte Observer; Greensboro News & Record; BBC radio (UK); China State Television.

•Organizing and managing conferences

- Textile Intelligence Centre, Quarterly Board Meetings, Fall 1992 – Summer 1997.
- The Textile and Clothing Network monthly cluster meetings between Fall 1996 – Spring 1998.
- “Harnessing Information Technology Successfully in Your Business” Textile and Clothing Network Conference, Huddersfield, November 1997.
- “Textile & Clothing: the next 10 years - Developing a Regional Innovation Strategy for the Textile and Clothing Industries”, in partnership with Bradford Business Link, Bradford, July 1998.
- The Technical Textile Industry and its Markets - a seminar organized in association with the American Textile Manufacturers Institute, July 2001.
- Southern Textile Association Winter Technical Seminar, Charlotte, January 2003, program organized in association with the Southern Textile Association and the North Carolina Department of Commerce.

•Membership of Professional Bodies

- The Textile Institute
- International Textile and Apparel Association
- American Association of Textile Chemists and Colorists

Serving on Boards

- Mount San Antonio Community College Department of Fashion Advisory Board 2011-16
- California Community Colleges Fashion Symposium Project Committee 2009-2013
- Fashion Business Inc. 2010-2011
- Critical Mass Manufacturing 2012-2103
- AM4U Inc. 2012-2103
- Long Beach City College, Fashion Department, 2015-2017
- Santa Ana College, Fashion Department, 2016.



# ANGELLA J. KIM, Ph.D

Department of Apparel Merchandising and Management

California State Polytechnic University, Pomona

3801 W Temple Ave, Pomona CA 91768

Phone: 909-869-2862 • Email: [akim@cpp.edu](mailto:akim@cpp.edu)

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## EDUCATION

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**2014 Ph.D. in Design** (Concentration: Apparel Studies-Retail Merchandising and Consumer Studies)

University of Minnesota-Twin Cities

College of Design

Department of Design, Housing, and Apparel

Minneapolis/Saint Paul, MN USA

**2010 M.S. in Clothing and Textiles** (Concentration: Fashion Marketing)

Yonsei University

College of Human Ecology

Department of Clothing and Textiles

Seoul KOREA

**2008 B.S. in Human Environment and Design, B.S. in Clothing and Textiles**

Yonsei University

College of Human Ecology

Department of Human Environment and Design

Department of Clothing and Textiles

Seoul KOREA

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## PROFESSIONAL APPOINTMENTS

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**Assistant Professor**

Sep 2014 – Present

Department of Apparel Merchandising and Management

Don B. Huntley College of Agriculture

California State Polytechnic University-Pomona, Pomona, CA USA

**Graduate Instructor**

Sep 2012 – May 2014

Department of Design, Housing, and Apparel

College of Design

University of Minnesota, Minneapolis/Saint Paul, MN USA

**Graduate Assistant** (Research and Teaching)

Sep 2011 – May 2014

Department of Design, Housing, and Apparel

College of Design  
University of Minnesota, Minneapolis/Saint Paul, MN USA

**Researcher**

Sep 2010 – Aug 2011

Human Ecology Research Institute  
Yonsei University, Seoul KOREA

**Graduate Assistant** (Research and Teaching)

Sep 2008 – Jun 2010

Department of Clothing and Textiles  
College of Human Ecology  
Yonsei University, Seoul KOREA

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## RESEARCH

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**Publications**

*Published in peer-reviewed journals*

- Choi, E., Ko, E., & **Kim, A.J.** (2016). Explaining and predicting purchase intentions following luxury-fashion brand value co-creation encounters. *Journal of Business Research*, 69(12), 5827-5832. (SSCI)
- Kim, A.J.**, & Johnson, K.K.P. (2016). Power of consumers using social media: Examining the influences of brand-related user-generated content on Facebook. *Computers in Human Behavior*, 58, 98-108. (SSCI)
- Wu, J., **Kim, A.J.**, & Koo, J. (2015). Co-design visual merchandising in a 3D virtual store: A facet theory approach. *International Journal of Retail & Distribution Management*, 43(6), 538-560. (SCOPUS)
- Johnson, K.K.P., Kim, E., Lee, J.Y., & **Kim, A.J.** (2014). Identifying antecedents of risky appearance management behaviors: The United States and South Korea. *Clothing and Textiles Research Journal*, 32(2), 107-123. (SSCI)
- Wagner, H., **Kim, A.J.**, & Gordon, L. (2013). Relationship between personal protective equipment, self-efficacy, and job satisfaction of women in the building trades. *Journal of Construction Engineering and Management*, 139(10), 04013005. [Online Version] doi: 10.1061/(ASCE)CO.1943-7862.0000739. (SCI)\*
- Kim, A.J.**, & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480-1486. (SSCI)\*\*
- Kim, A.J.**, & Ko, E. (2010). Impacts of luxury fashion brand's social media marketing on customer relationship and purchase intention. *Journal of Global Fashion Marketing*, 1(3), 164-171. (SCOPUS)
- Ko, E., **Kim, A.J.**, & Kim, S. (2010). The preference and purchasing intention of traditional design by characteristics of traditional culture values and preferred style image of traditional design. *Journal of the Korean Society of Clothing and Textiles*, 34(7), 1053-1064.
- Ko, E., Lee, J., **Kim, A.J.**, & Burns, L.D. (2010). Moderating effect of lifestyle on consumer behavior of loungewear with Korean traditional fashion design elements. *Journal of Global Academy of Marketing Science*, 20(1), 15-26. (SCOPUS)
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**Kim, A.J., & Ko, E.** (2010). Impact of design characteristics on brand attitude and purchase intention: focused on luxury fashion brands. *Journal of the Korean Society of Clothing and Textiles*, 34(2), 252-265.

\*all listed authors contributed equally.

\*\*selected as the most downloaded articles from *Journal of Business Research* in the last 90 days (since January 2013) and the most cited *Journal of Business Research* articles published since 2012 (extracted from SCOPUS).

*Submitted to peer-reviewed journals*

Wu, J., **Kim, A.J.**, & Chen, L. (under review). Attitudes toward crowdsourced, community-involved new product development. *Journal of Fashion Marketing & Management*.

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## Presentations

*Refereed reviewed presentations*

**Kim, A.J.** \* (2017, March). Influence of social media eWOM on brand outcomes: Focusing on message, source, and receiver characteristics. *Presented at the American Collegiate Retailing Association 2017 Annual Conference in Bloomington, MN USA.*

Dabas, C.S., & **Kim, A.J.** \* (2016, March). Model of wearable technology adoption: Examining the influences of technology, individual, social, and product-related predictors. *Presented at the American Collegiate Retailing Association 2016 Annual Conference in Secaucus, NJ USA.*

Wu, J. \*, Thoreson, N., Koo, J., & **Kim, A.J.** (2015, October). Co-design visual displays in virtual stores: An exploration of consumer experience. *Presented at the 2015 World Conference on Mass Customization and Personalization in Montreal CANADA.*

Choi, E., Ko, E., & **Kim, A.J.** \* (2015, June). Value co-creation process of luxury fashion brands: The relationships among encounter attributes, consumer value, brand value and purchase intention. *Presented at 2015 Global Fashion Management Conference in Florence ITALY.*

**Kim, A.J.** \*, & Im, H. (2014, May). Investigating the relationship between self-monitoring and self-presentation using fashion brands on Facebook. *Presented at 2014 Fashion and Communication Symposium in Saint Paul, MN USA.*

Min, S. \*, **Kim, A.J.**, & Wu, J. (2013, October). The relationship between consumer characteristics and online co-design involvement. *Presented at International Textile and Apparel Association 2013 Annual meeting in New Orleans, LA USA.*

Wu, J., **Kim, A.J.** \*, & Koo, J. \*. (2013, October). Co-design visual merchandising in a 3D virtual store with Target: A facet theory approach. *Presented at International Textile and Apparel Association 2013 Annual meeting in New Orleans, LA USA.*

Johnson, K.K.P., Lennon, S.J., Mun, J.M., Koo, J., **Kim, A.J.**, Choi, D., & Yoo, N. (2013, October). Use of undergraduates in clothing and textiles research. *Poster presented at International Textile and Apparel Association 2013 Annual meeting in New Orleans, LA USA.*

**Kim, A.J.** \* (2013, April). An examination of consumers' attitude and knowledge on the ethical issues involved with fast

fashion consumption: A qualitative inquiry. *Presented at 2013 Fashion and Social Responsibility Symposium in Saint Paul, MN USA.*

- Kim, A.J.**\*, & Johnson, K.K.P. (2012, November). Body image and retail therapy behaviors among college students. *Presented at International Textile and Apparel Association 2012 Annual meeting in Honolulu, HI USA.*
- Johnson, K.K.P.\* , Kim, E., Lee, J.Y., & **Kim, A.J.** (2012, November). Predicting risky appearance management behaviors in young women: A comparison between the U.S. and South Korea. *Presented at International Textile and Apparel Association 2012 Annual meeting in Honolulu, HI USA.\*\**
- Gordon, L.\* , **Kim, A.J.**\*, & Wagner, H. (2012, November). Pretty in PPE: The relationship between personal protective equipment (PPE), self-efficacy, and job satisfaction of women in the building trades. *Presented at International Textile and Apparel Association 2012 Annual meeting in Honolulu, HI USA.*
- Wu, J., **Kim, A.J.**\*, Damminga, C., & Chen, L. (2012, July). A content analysis of online mass customization 1.0, 2.0, and crowd sourced fashion businesses. *Presented at 2012 Global Marketing Conference in Seoul KOREA.*
- Johnson, K.K.P., Kim, E., Lee, J.Y.\* , & **Kim, A.J.**\* (2012, April). Identifying variables impacting risky appearance management behaviors. *Presented at 2012 Fashion and Health Symposium in Saint Paul, MN USA.*
- Ko, E., Chun, E.\* , **Kim, A.J.**, & Choi, H. (2011, November). Fashion collaboration cases between academia and industry in Korea. *Presented at International Textile and Apparel Association 2011 Annual meeting in Philadelphia, PA USA.*
- Kim, A.J.**\* , & Ko, E. (2010, September). Luxury fashion brands' social media marketing activities: How do they affect customer equity and purchase intention? *Presented at 2010 Global Marketing Conference in Tokyo JAPAN.\*\**
- Kim, A.J.**\* , & Ko, E. (2010, May). The influence of luxury fashion brand's social media marketing on customer loyalty and purchase intention. *Presented at 2010 KAMS Spring International Conference in Seoul KOREA.*
- Kim, S. & **Kim, A.J.**\* (2010, May). A study on marketing strategy of loungewear with traditional elements: Focused on lifestyle types. *Presented at 2010 KAMS Spring International Conference in Seoul KOREA.*
- Ko, E. & **Kim, A.J.**\* (2009, November). A study on purchasing behavior of loungewear: Focused on traditional culture based apparel and lifestyle. *Presented at 2009 KAMS/KSMA Fall International Conference in Seoul KOREA.*
- Ko, E., Kim, M., Kim, K.H., Kim, E.Y., **Kim, A.J.**\* , & Byun, M.S. (2009, November). Corporate social responsibility: An initiative approach into fashion business. *Presented at Society for Marketing Advances 2009 Annual Conference in New Orleans, LA USA.*
- Ko, E., **Kim, A.J.**\* , Lee, J., Kim, K.H., & Lee, C.H. (2009, October). The research on the Korean loungewear market and consumers' preference of loungewear with traditional details and sewing techniques. *Presented at International Textile and Apparel Association 2000 Annual meeting in Bellevue, WA USA.*
- Kim, A.J.**\* , & Ko, E. (2009, October). The moderating influence of customer characteristics on the relationship between design characteristics and purchase Intention: Focused on the luxury fashion brands. *Presented at International Textile and Apparel Association 2000 Annual meeting in Bellevue, WA USA.*
- Kim, A.J.**\* , & Ko, E. (2009, May). Impact of design characteristics on brand attitude and purchase intention: Focused on luxury fashion brands. *Presented at 2009 KAMS Spring International Conference and Fashion Marketing*

*Symposium in Seoul KOREA.*

\* indicates the presenter of oral presentations.

\*\* received paper of distinction award, best conference paper award.

*Invited presentations*

**Kim, A.J.** (2014, October). Fashion business and social media: What impact do consumer activities using social media have on fashion brands? *Presented at the Research Center for Textiles and Fashion Symposium: Research Trend in the Field of Clothing & Textiles, Yonsei University, Seoul KOREA.*

## TEACHING

### Courses Taught

*California State Polytechnic University-Pomona*

AMM 463/463A: Apparel Research Project (Spring 2016; Fall 2016; Spring 2017)

AMM 454A: Apparel Retail Simulation 1 Activity (Winter 2016; Fall 2016, Winter 2017)

AMM 443A: Apparel Market Analysis and Reporting (Spring 2015, Winter 2017)

AMM 370A: Apparel Retail Practicum (Spring 2015)

AMM 245: Consumerism-Impact and Issues (Fall 2015, Winter 2016, Winter 2017, Spring 2017)

AMM 230: Fashion Promotion (Fall 2014, Winter 2015, Spring 2015, Fall 2015, Winter 2016, Spring 2016; Fall 2016; Spring 2017)

AMM 210A: Apparel Design Analysis Activity (Fall 2014)

*University of Minnesota-Twin Cities (Graduate Instructor/Teaching Assistant)*

RM 4212W: Dress, Society, and Culture (Spring 2012, Spring 2013, Spring 2014)

RM 2215: Multichannel Retailing (Fall 2012)

RM 1201: Fashion, Ethics, and Consumption (Fall 2011)

### Courses Prepared (not taught)

*California State Polytechnic University-Pomona*

AMM 3300 Apparel Brand Management

AMM 3750 Digital Commerce for Fashion Business

## GRANTS, AWARDS, & RECOGNITIONS

<b>Teacher-Scholar Award</b> (4 WTU awarded)	May 2016
California State Polytechnic University-Pomona, Pomona, CA USA	
<b>Citations of Excellence Award 2015</b>	2015
Emerald Group Publishing	

Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480-1486.

<b>Student Design &amp; Scholarship Excellence Award</b> (Graduate Team: DHA - Apparel Studies)	May 2014
College of Design, University of Minnesota, Minneapolis/Saint Paul, MN USA	
<b>Mary Hoover Award for Teaching Excellence</b> (Nomination)	Apr 2014
College of Design, University of Minnesota, Minneapolis/Saint Paul, MN USA	
<b>2014 College of Design Outstanding Graduate Student Award</b> (Nomination)	Feb 2014
College of Design, University of Minnesota, Minneapolis/Saint Paul, MN USA	
<b>Joan Laughlin Fellowship</b> (\$1,000)	Oct 2013
International Textiles and Apparel Association 2013 Annual Conference, New Orleans, LA USA	
<b>Graduate Program Block Grant</b> (\$650)	Apr 2013
College of Design, University of Minnesota, Minneapolis/Saint Paul, MN USA	
<b>Paper of Distinction Award</b> (Social Psychological Track)	Nov 2012
International Textiles and Apparel Association 2012 Annual Conference, Honolulu, HI USA	
<b>Peggy Matthews Fellowship</b> (\$2,000)	Sep 2011
College of Design, University of Minnesota, Minneapolis/Saint Paul, MN USA	
<b>Thesis Award</b>	Nov 2010
Graduate School, Yonsei University, Seoul KOREA	
<b>Best Conference Paper Award</b>	Sep 2010
2010 Global Marketing Conference, Tokyo JAPAN	
<b>Scholarship</b> (for Outstanding Academic Performance)	Mar 2006, Sep 2006,
Department of Human Environment and Design, College of Human Ecology, Yonsei University, Seoul KOREA	
<b>Honors</b> (for Outstanding Academic Performance)	Aug 2007, Feb 2007
Department of Human Environment and Design, College of Human Ecology, Yonsei University, Seoul KOREA	
<b>GREEN S Design Award</b>	Jun 2007, Jun 2006
Department of Human Environment and Design, College of Human Ecology, Yonsei University, Seoul KOREA	
<b>RED S Design Award</b>	Dec 2006
Department of Human Environment and Design, College of Human Ecology, Yonsei University, Seoul KOREA	
<b>High Honors</b> (for Outstanding Academic Performance)	Aug 2006
Department of Human Environment and Design, College of Human Ecology, Yonsei University, Seoul KOREA	

*Funds in Support of Travel*

<b>Ludden Conference Presentation Funds (\$200)</b>	Oct 2013, Jul 2012
College of Design, University of Minnesota, Minneapolis/Saint Paul, MN USA	
<b>Travel Grant (\$1,000)</b>	Oct 2012
Community of Scholars Program, University of Minnesota, Minneapolis/Saint Paul, MN USA	
<b>Travel Grant (\$2,000)</b>	Nov 2009
Department of Clothing and Textiles, College of Human Ecology, Yonsei University, Seoul KOREA	

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## PROFESSIONAL SERVICES

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### *Professional Organization Meetings*

<b>Session Chair</b> The American Collegiate Retailing Association (ACRA) 2017 Annual Conference Social Media Marketing Session	
<b>Track Co-chair</b> The American Collegiate Retailing Association (ACRA) 2017 Annual Conference Undergraduate Research Track	
<b>Session Chair/Presider</b> 2014 Fashion and Communication Symposium Self-Presentation and Promotion via Social Media Session	

### *Reviewer for Refereed Journal Articles*

<b>Journal of Global Fashion Marketing Editorial Board</b> Member	Sep 2015 – Present
<b>Journal of Global Sports Management Editorial Board</b> Member	Sep 2015 – Present

### *Reviewer for Conferences*

<b>International Textiles and Apparel Association Conference</b> Merchandising/Retailing II: Visual & Promotion Track	2017
<b>International Textiles and Apparel Association Conference</b> Consumer Behavior Track	2015, 2016
<b>International Textiles and Apparel Association Conference</b> Social/Psychological Track	2015

### *Ad hoc Reviewer*

<b>The Journal of Business Research</b>	
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## PROFESSIONAL ACTIVITIES & MEMBERSHIPS

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<b>The Fashion Group International</b> Member	Oct 2016 – Present
<b>The American Collegiate Retailing Association</b> Member	Jan 2016 – Present
<b>The Korean Society of Fashion Business</b> Member	Mar 2015 – Present
<b>International Textile and Apparel Association</b> Member	Sep 2009 – Present
<b>The Korean Society of Clothing and Textiles</b> Member	Sep 2008 – Present

The Korean Scholars of Marketing Science Member

Sep 2008 – Present

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**PROFESSIONAL DEVELOPMENT & TRAINING**


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<b>Teaching What You Don't Know</b>	Feb 2017
Faculty Center for Professional Development, California State Polytechnic University-Pomona, Pomona, CA USA	
<b>PolyTeach 2016: Technology and the Innovative University</b>	Apr 2016
Faculty Center for Professional Development, California State Polytechnic University-Pomona, Pomona, CA USA	
<b>Getting Students to Participate in Class</b>	Feb 2016
Faculty Center for Professional Development, California State Polytechnic University-Pomona, Pomona, CA USA	
<b>Visual Retailing CAD Software Training</b>	Sep 2015
Department of Apparel Merchandising and Management, California State Polytechnic University-Pomona, Pomona, CA USA	
<b>PolyTeach 2015: Technology and the Innovative University</b>	Apr 2015
Faculty Center for Professional Development, California State Polytechnic University-Pomona, Pomona, CA USA	
<b>2015 Fashion Law Symposium: "Sketch Goes Tech"</b>	Mar 2015
Loyola Law School, Los Angeles, CA USA	
<b>Teaching Happy Hour: Getting Students Interested and Engaged</b>	Oct 2014
Faculty Center for Professional Development, California State Polytechnic University-Pomona, Pomona, CA USA	
<b>PolyTeach 2014: Technology and the Innovative University</b>	Apr 2014
Faculty Center for Professional Development, California State Polytechnic University-Pomona, Pomona, CA USA	
<b>The Digital Idea Stream: 5 Technologies for Teaching, Learning and Research</b>	Aug 2013
Center for Teaching and Learning, University of Minnesota, Minneapolis, MN USA	
<b>Commenting on and Grading Student Writing</b>	Aug 2012
Center for Writing, University of Minnesota, Minneapolis, MN USA	
<b>Practicum in University Teaching for Nonnative English Speakers</b>	Spring 2012
Center for Teaching and Learning, University of Minnesota, Minneapolis, MN USA	
<b>Learning in Large Classes: What You Can Do With 50 Students That You Can't Do With 15</b>	Aug 2011
Center for Teaching and Learning, University of Minnesota, Minneapolis, MN USA	



# Saemee Lyu, Ph.D

Assistant Professor  
Department of Apparel Merchandising & Management  
Don B. Huntley College of Agriculture  
California State Polytechnic University, Pomona  
3801 West Temple Avenue, Pomona, CA 91768  
251-Building 45  
(909) 869-3476  
[slyu@cpp.edu](mailto:slyu@cpp.edu)

## EDUCATION

---

- University of Minnesota**, Twin Cities, Minnesota, USA **2012 – 2016**  
**Doctor of Philosophy** in Design  
Apparel Track: Product Development Emphasis  
Dissertation: *Posture Modification Effects Using Soft Materials Structures*  
Advisor: Dr. Karen L. LaBat
- Seoul National University**, Seoul, Korea **2009 – 2011**  
**Master of Science** in Clothing and Textiles  
Thesis: *Photograph-based Three Dimensional Anthropometric Estimation*  
Advisor: Dr. Yunja Nam
- Kyungpook National University**, Daegu, Korea **2005 – 2009**  
**Bachelor of Science**, Summa cum laude, in Clothing and Textiles  
Advisor: Dr. Hee-Eun Kim

## PROFESSIONAL EMPLOYMENT

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- California State Polytechnic University**, Pomona, USA **Fall 2016-**  
**Assistant Professor** in Apparel Merchandising and Management **Present**

## COURSE TAUGHT

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- Instructor** **Fall 2016-**  
California State Polytechnic University, Pomona, USA **Present**
- AMM 314/314A: Apparel Technical Design  
AMM 410/410A: Apparel Product Development I  
AMM 414/414A: Apparel Product Development II  
AMM 492/492A: Apparel Production Simulation

## TEACHING EXPERIENCE

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### Teaching Assistant

2014 – 2015

University of Minnesota, Saint Paul, Minnesota, USA

Course Title: *Textile Analysis* (ADES 2213)

2014 – 2015

Course Description: Taught a lab section including physical, chemical, and biological characteristics of fibers, yarns, textile structures, and finishes which effect performance/appearance of textile products. Students majoring in apparel design, interior design, and retail merchandising.

(Sep – Dec)

Course Title: *Product Development, Softline* (ADES 4215)

Jan 2015

Course Description: Assisting the lead instructor teaching semester-long project (teams of apparel design and retail merchandising seniors). Project includes design of products for specific target market for marketability, effectiveness, reliability, and quality. Team project developed with industry partner Target Corporation.

– May 2015

### Teaching Assistant

2009 – 2010

Seoul National University, Seoul, Korea

Course Title: *Advanced Clothing Construction* (353.223.A)

Sep 2010

Course Description: Assisted the lead instructor teaching a lab section, studio based class, presenting advanced draping and flat pattern techniques. Students develop their own size jacket and slacks.

– Dec 2010

Course Title: *Clothing Construction* (353.329.B)

Mar 2009

Course Description: Assisted the lead instructor teaching a lab section, studio based class, presenting basic draping and flat pattern techniques. Skills are developed and explored through short exercises and original design projects.

– Jun 2009

### Tutor

Mar 2006

Kyungpook National University, Daegu, Korea

– Jun 2006

Course Title: *Principles of Clothing Construction* (CLTX221)

Course Description: Taught basic draping and flat pattern techniques for an individual undergraduate student.

## RESEARCH INTEREST

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**Product Development for Human Health and Well-Being**

**3D Scanning Technology**

**Human Performance in Apparel Industry**

**Creative and Functional Design**

**Apparel Fit and Sizing**

## PEER-REVIEWED WORK

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### Publication

Lyu, S., & LaBat, K. L. (2016). Effects of natural posture imbalance on posture deviation caused by load carriage. *International Journal of Industrial Ergonomics*, 56, 115-123.

### Design Scholarship (*Juried Exhibition*)

Lyu, S. (2015). *Blue Jeans Hanbok*. 2015 Annual Conference, International Textiles and Apparel Association. Santa Fe, New Mexico, Nov, 2015.

### Oral Presentation

Lyu, S. & LaBat, K. L. (2014). “*Shapewear*” for Women as a Postural Improvement Garment. 2014 Annual Conference, International Textiles and Apparel Association. Charlotte, North Carolina, Nov, 2014.

Han, H., Nam, Y., Shin, A., Kim, M., & Lyu, S. (2009). *Measurement Methods for Automatic 3D Body Scan Measurement*. Proceedings of 17th World Congress on Ergonomics. International Ergonomics Association. Beijing, China, August, 2009.

## PATENT

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### U.S. Non-Provisional Patent Application (*Patent Pending*)

Lyu, S. (Filed, Oct 2015). *Posture Improvement Shapewear Garment and Systems (No. 14/924,261)*. Washington, DC: U.S. Patent and Trademark Office.

## RESEARCH EXPERIENCE

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### Research Assistant

2012 – 2014

University of Minnesota, Saint Paul, Minnesota, USA

Supervisor: Dr. Karen L. LaBat

Responsibility: The lead research assistant in the UMN Human Dimensioning© Lab

-Worked with teams of researchers to organize projects and maintain laboratory hardware and software.

-Assisted in scanning participants for miscellaneous projects: 3M grant project, graduate students’ research, and undergraduate student class projects.

Project Title: *Shapewear Posture Improvement System Development for Women*

2014

Project Description: Developed posture improvement system combined with a typical shapewear garment. US Provisional Patent Application filed by UMN Office for Technology Commercialization (Oct 2014)

Project Title: *Posture changes when wearing Ergo-baby, baby carrier*

2013

Project Description: Compared women’s posture changes with various baby carrier positions.

**Research Assistant**

2009 – 2011

Seoul National University, Seoul, Korea

Supervisor: Dr. Yunja Nam

Responsibility: Assisted the project leaders in the Clothing Human Ergonomics Lab  
-Worked with teams of researchers to organize projects and maintain laboratory hardware and software.

Project Title: *Military Textile Technology Development Cooperation for Next Generation*

Mar 2010  
– May 2011

Project Description: Measured over 700 Korean army soldiers (male and female) and developed patterns for the military uniform.

Project Title: *Development PLM System for Custom-MTM in the Apparel*

Apr 2010  
– Mar 2011

Project Description: Researched and developed an automatic 2D anthropometric measurement system.

Project Title: *The 5th Innovational Cluster Construction of Digital Contents Industrialization for U-Life*

Dec 2009  
– Nov 2010

Project Description: Designed classification of man's body types and novel anthropometric measurement for some dimensions.

Project Title: *Enhanced Protocol of Anthropometric Measurement*

Mar 2009  
– Aug 2009

Project Description: Developed a protocol to obtain accurate anthropometric measurements from 3D scanned bodies.

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**PROFESSIONAL EXPERIENCE**

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**Observer**

Ministry of Knowledge Economy, Seoul, Korea

Sep 2010  
– Oct 2010

Project Title: *The 6th Size Korea*

Project Description: Worked with a team of researchers to organize the project.

**Scholar**

Kyungpook National University, Daegu, Korea

Sep 2006  
– Feb 2007

Project Title: *Textile Industry Cluster Innovator (TICI)*

Project Description: TICI was one of the national projects supervised by the Ministry of Education and Human Resources Development in South Korea to train high-quality human resources in the textile industry. It offered scholarships and funds for field trips for students in the clothing and textiles field.

Responsibility: The TICI scholars went to Japan and were tutors for freshman of Kyungpook National University to teach how to be innovative in the textile Industry in Daegu Gyueongbuk.

## PROFESSIONAL ACTIVITY

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### **Fashion Shows (Participation)** 2007 – 2009

*2009 University Fashion Week*, Seoul Business Agency, Seoul, Korea Oct 2009

Work Description: Advanced Tailoring for Man's Suit

*2009 Fashion Show of FOS*, Seoul National University, Seoul, Korea Oct 2009

Work Description: Advanced Tailoring for Man's Suit

*2009 University Fashion Show*, Apr 2008

Korea Research Institute for Fashion Industry, Daegu, Korea

Work Description: Undergraduate senior's project

*The 10th Kyungpook National University Fashion Festival*, Kyungpook National University, Daegu, Korea Oct 2007

Work Description: Undergraduate senior's project

### **Exhibitions (Participation)** 2008 – 2010

*2010 Exhibition of FOS jJ*, Seoul National University, Seoul, Korea Oct 2010

Work Description: Functional Apparel Design (Denim jacket and jeans)

*2010 Exhibition of FOS*, Seoul National University, Seoul, Korea Oct 2010

Work Description: Textile Fabrication for Apparel Design (Digital Textile Printing, Dyeing & Braiding)

*The Best Graduation Work (Honored)*, Kyungpook National University, Daegu, Korea Oct 2007  
– Jul 2008

Work Description: Undergraduate senior's project

*The 7th Anniversary International Textile Fair*, Daegu Gyeongbuk Textile Industries Association, Daegu, Korea Mar 2008

Work Description: Undergraduate senior's project

## PROFESSIONAL DEVELOPMENT & TRAINING

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*Poly Teach 2017: Technology and the Innovative University*, Faculty Center for Professional Development, California State Polytechnic University, Pomona, USA April 2017

*Teaching What You Don't Know*, Faculty Center for Professional Development, California State Polytechnic University, Pomona, USA Feb 2017

*TUKA CAD training for faculty teaching (3-day workshop)*, Tukatech INC., Los Angeles, USA Aug 2016

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## PROFESSIONAL MEMBERSHIP

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**International Textiles and Apparel Association**

2014 – Present

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## GRANT

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**US Provisional Patent Application Prosecution Funding**

Oct 2014

U of M Office for Technology Commercialization, Minneapolis, Minnesota, USA

Project Title: *Posture Improvement Shapewear Garment and Systems*  
(No. 62/069,646)

Amount: \$4,527.36

**Graduate Student Research Assistance Grant**

Nov 2014

U of M College of Design, Saint Paul, Minnesota, USA

Project Title: *Posture Modification Effects Using Soft Materials Structures*

Amount: \$1,130.00

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## HONOR

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**Peggy Henry Matthews Fellowship**

2012

University of Minnesota, Saint Paul, Minnesota, USA

Amount: \$2,000.00

**Kyungpook National University Alumni Scholarship for Studying Abroad**

2012

Kyungpook National University, Daegu, Korea

Amount: \$5,000.00

**Dae Won F and C Award**

2009

Seoul National University, Seoul, Korea

Criteria: The Best Design of Seoul National University Fashion Show

**Kyungpook National University Presidential Award**

2009

Kyungpook National University, Daegu, Korea

Criteria: Academic performance, outstanding leadership, creativity, community involvement, and contribution to diversity: top of college (1 person in each college)

**Scholarship for Academic Excellence (Global Challenger A)**

2007 – 2008

Kyungpook National University, Daegu, Korea

Criteria: Top of dept. (1 person in each dept.), full scholarship for an academic year

**TICI Best Presentation Award**

2007

Kyungpook National University, Daegu, Korea

<b>TICI Best Report Award</b> Kyungpook National University, Daegu, Korea	2007
<b>Kyungpook National University TICI Scholarship</b> Kyungpook National University, Daegu, Korea	2007
<b>Scholarship for Academic Excellence</b> Kyungpook National University, Daegu, Korea	2006

## **COMPUTER SKILL**

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### **Applicable to**

#### **Body scanning**

ScanWorX

#### **Fashion illustration**

(Adobe Creative Suite)

Illustrator

Photoshop

Flash Professional

After Effects

#### **Pattern making**

TUKA design (CAD)

TUKA 3D

Padsystem

DC Suite

#### **Textile design**

NedGraphics

# Muditha M. Senanayake, Ph.D. C Text ATI

## Curriculum Vitae

428 E Golden Springs Dr.  
Diamond Bar CA 91765

Phone: 732 501 3303

E-mail: muditha\_senanayake@yahoo.com

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### I. EDUCATION

- **Ph.D.**, North Carolina State University, Raleigh, NC. USA. 2004  
**Major** -Textile Technology Management (TTM), **Minor** - Industrial Engineering (IE) – (GPA: 4.0/4.0)  
**Dissertation:** Mixed Mass Production and Mass Customization: Best Practices for Apparel
- **Master of Textiles (MT)**, North Carolina State University, Raleigh NC. USA. 2001  
**Major** - Textile Management and Technology – (GPA: 4.0/4.0)  
**Project Title:** Integrating Technology into Apparel New Product Development
- **BS (Engineering)**, University of Moratuwa, Moratuwa, Sri Lanka. 1995  
**Major** - Textile and Clothing Technology – (Summa Cum Laude)  
**Thesis:** Improving Productivity through Total Quality Management (TQM)
- **(CIMA-Stage 1) Chartered Institute of Management Accountants**, UK. 1993

### II. PROFESSIONAL EXPERIENCE

#### Summary:

- University teaching experience (20 years-undergraduate, graduate and industry extension)
- Instructional technology experience (face-to-face, hybrid, online - synchronous and asynchronous)
- Multimedia learning object (interactive simulations and animations) development experience
- Recipient of academic awards (Teacher of the year and Advisor of the year)
- Academic advising experience (undergraduate and graduate)
- Research and grant writing experience (field of study related to apparel customization & personalization, manufacturing, technology integration and development, technology management, pedagogy).
- Presenter of national and international academic and industry conferences
- University administrative experience (department, college, university senate)
- Textile/Apparel industry experience (5 years – product development, production and quality management, research and development in South East Asia and USA)
- Member of national and international professional associations and experience in various committees
- Journal manuscript reviewer and conference organizing experience
- Graduate and undergraduate program, curriculum and course development experience
- Sabbatical experience
- Senior advisor and founding member of Apparel Made for You (AM4U) (demand activated virtual inventory apparel manufacturing architecture)
- Instrumental in obtaining the \$1.14M AIMS360 ERP software donation to Cal Poly, Pomona.

#### A. ACADEMIC EXPERIENCE

- **Associate Professor** of Apparel Product Development, Production, Merchandising and Management, Dept. of Apparel Merchandising & Management, California State Polytechnic University, Pomona. CA. USA Sep 2013 – Present
- **Assistant Professor** of Apparel Product Development, Production, Merchandising and Management



- Dept of Apparel Merchandising & Management,  
California State Polytechnic University, Pomona. CA. USA Sep 2007 – Aug 2013
- **Visiting Professor**, University of Moratuwa, Sri Lanka July 2009 – Present
    - Teaching: M.Sc. degree courses (Summer)
  - **Assistant Professor** of Apparel Product Development  
Dept of Apparel, Textiles, and Interior Design  
Kansas State University, Manhattan, KS. USA. Aug 2006 – Sep 2007
  - **Adjunct Professor** of Fashion Marketing and Management  
Department of Fashion Marketing & Management  
Berkeley College, West Patterson, NJ, USA. Jan. 2005 – Aug 2006
  - **Post Doctoral Research Associate**, Department of Textile and Apparel, Technology and Management  
North Carolina State University, Raleigh, NC, USA. May 2004 - Oct. 2004
    - New Product Development – Material analysis and design optimization for a blood pressure monitoring machine (Supervisor: Dr. Trevor Little)
    - Management – Enterprise risk management (Supervisor: Dr. Helmet Hergeth)
  - **Graduate Research/Teaching Assistant**, Department of Textile and Apparel, Technology and Management  
NC State University, Raleigh, NC, USA. Aug 1999 - April 2004
    - New Product Development (NPD):
      - Cost evaluation: Application of new technology invention vs. existing NPD
      - Analysis of information needed to drive apparel NPD
      - Development of measures to benchmark apparel NPD
    - Start up business development - Information Technology systems for textile & apparel industry
      - Market research, trend research and economic forecasts for US, Canada, Mexico and Caribbean
      - Designing and implementing a textile & apparel industry Web Survey on information systems
    - Supply Chain/Operations/Technology Management:
      - Analysis of apparel mass customization and manufacturing matrices
      - Modeling and analysis of apparel manufacturing systems using computer simulation
      - Analysis of apparel production systems to support quick response apparel replenishment
    - Marketing, Merchandising and Sourcing Strategies:
      - Sourcing benefit analysis based on world regions
      - Analysis of advanced apparel business practices
      - Analysis and comparison of the strategic position of apparel manufacturing and retail companies
  - **Lecturer**, Apparel Technology  
Department of Textile & Clothing Technology,  
University of Moratuwa, Moratuwa, Sri Lanka Jan. 1997 - Aug. 1999

## B. INDUSTRY EXPERIENCE

- **Consultant** (Sabbatical), AM4U Inc. Production implementation, Training program development and Job description development, AM4U Integrated Mini Factory, Rancho Cucamonga CA. Sep 2014 – Dec 2014
- **Senior Advisor**, AM4U Inc. Aug 2012 - 2015
- **Business/Technical Consultant** Aug 2007 – Present

- **Manager, Research & Development,**  
Maidenform Brands, Inc. Bayonne, NJ, USA. Nov. 2004 - Mar. 2006
  - Provisional Patents
    - Hook retaining strip for garments and method of affixing the strip to a garment
    - Fasteners on garments and method of making fasteners
  - R&D projects:
    - Tagless label product initiative for both national and private label brands
    - Machine development for the application of “tagless” labels on bra hook & eyes
    - Development of comfortable hook & eye
    - Application of Nano-Technology based laminations for functional fabrics
    - Sew free technology development with bonded fabrics and fused fabric applications
    - Under wire incorporated comfortable stretch foam and breathable foam package development
    - Process improvement: customized software system for design, merchandising, and PD
  - Other functions
    - Coordinate with local and foreign testing labs for material testing
    - Coordinate and assist designers to search and develop new materials
    - Collaborate with retailers on private label product development
    - Facilitate technology and knowledge transfer from R&D to production
    - Liaison with internal and external legal departments on filing patents, exclusivity agreements, non disclosure agreements, licensing agreements and evaluating non infringements
    - Travel to national & international suppliers & contractors on product research & project implementations
    - Attend national and international trade shows, exhibitions and conferences
  
- **Management & Technical Consultant** to Apparel Industry in Sri Lanka Jan. 1997 - Aug. 1999
  - Consultant - strategy for business development and systems improvement in production, quality, material handling and facility environment
  - Training supervisory and middle management on technical and operations management functions
  - Designing and conducting training courses in quality control, quality assurance, process control, and work-study (method and time Study)
  
- **Management Executive** - Aitken Spence Garments (Pvt.) Ltd. Colombo, Sri Lanka Dec. 1994 - Dec. 1996
  - **Manager: Product Development**
    - Responsible for centralized product development, sample production, pattern making, grading and marker making department
    - Liaising with suppliers, buyers and merchandisers on new product development
  - **Project Manager-Process Analysis and Improvement:**
    - Assisting the external company consultant in business process development projects
    - Improving facility layouts, material utilization, handling, production, quality and engineering systems
    - Implementing new manufacturing and needle point quality systems
    - Recruiting and training line managers for production and quality departments
    - Improving centralized merchandising, production planning, scheduling, monitoring and loading

### C. INDUSTRIAL TRAINING/INTERNSHIPS:

- **Intern** - Star Garments Ltd., Industrial Promotion Zone, Katunayake, Sri Lanka. July 1993 - Sep.1993

- Trained and gained knowledge in technical and management skills in several key areas of apparel manufacturing.
- Designed, planned, and implemented a shoulder pad production line to service the entire women's apparel manufacturing plant (35 production lines)
- **Intern** - Lanka Weaving Mills Ltd., Velona Group of Companies, Sri Lanka Aug. 1991 - Nov. 1991
  - Trained and gained knowledge in fabric manufacturing, dyeing, finishing and printing

### III. RESEARCH INTERESTS AND SCHOLARSHIP

#### A. RESEARCH INTERESTS

- Customization & Personalization: technology, operations, manufacturing, consumer, retail and production aspects of textiles and apparel (mass) customization & personalization

#### B. PUBLICATIONS

##### 1. Book Chapters

- Apparel Technology Integration and Development for Purchase Activated Manufacturing (2016). Book Title: Managing Complexity - Proceedings of the 8th World Conference on Mass Customization, Personalization, and Co-Creation (MCPC 2015), Montreal, Canada, October 20th-22th, 2015. Springer Proceedings in Business and Economics (ISBN 978-3-319-29058-4). [Edited by: Bellemare, J, Carrier, S., and Piller, F.] <http://www.springer.com/us/book/9783319290560>
- Product development in the apparel industry (2015) Book title: Garment manufacturing technology, Woodhead Publishing Series in Textiles #168, UK. (Edited by: R Nayak and R Padhye, RMIT University, Australia)

##### 1. Refereed Journal Manuscripts - In-Progress

- Senanayake, M. (In progress). Case study. Demand Activated Virtual Inventory Manufacturing Architecture: Apparel Made for You (AM4U). *International Journal of Fashion Design, Technology and Education*.
- Senanayake, M. (In progress). Need Analysis – Information Technology Literacy Skills for Non-Majority College Students. *Journal of Research on Technology in Education*.
- Senanayake, M. M. & Little, T. J. (In progress). Mixed Mass Production and Mass Customization: Modeling and Simulation Approach. *International Journal of Clothing Science & Technology*.

##### 2. Referred Journal Manuscripts/Full Papers/Extended Abstracts

- **Senanayake, M. M.** Raheja A. & Zhang, Yuhuan. (In submission). Automated body measurement extraction: A single camera approach. *International Journal of Clothing Science & Technology*.
- Che, Jianning, and **Senanayake, Muditha**. (2016 in review). The dependency of color measurement on surface temperature of textile, ceramic, plastic, paint, and print materials. *2017 AATCC International Conference*, March 28-30, Wilmington. NC.
- **Senanayake, Muditha**. (2016 in review). Interactive Computer Simulation Tool to Improve Cutting Room Decision Making (Pending). *2017 AATCC International Conference*, March 28-30, Wilmington. NC.

- Che, Jiangning, and **Senanayake, Muditha**. (2016 in review). A Statistical Analysis for Correlation Approach to Compensate the Measured CIELAB Colorimetric Data for Temperature Alterations. *Journal of Color Research and Application*.
- Che, Jiangning, Rong, Li, and **Senanayake, Muditha**. (2016). A Comparative Study on the Dependency of Color Measurement on Surface Temperature, *Journal of Coloration Technology*, 132(2): 144-152.
- Che, Jiangning, and **Senanayake, Muditha**. (2015). An Analysis of the Thermochromism Properties of Colored Composite materials. *Proceedings of the CAD RETEC 2015 Conference*, Oct 4-6, Indianapolis, Indiana
- **Senanayake, Muditha**, Kilduff, Peter, Grier, Bill. (2015). Apparel Technology Integration and Development for Purchase Activated Manufacturing. *Proceedings of the 8<sup>th</sup> World Conference on Mass Customization, Personalization, and Co-Creation: Managing Complexity*, Oct 21-23, Canada [Available in Springer Proceedings in Business and Economics, ISBN 978-3-319-29058-4, <http://www.springer.com/us/book/9783319290560>]
- **Senanayake, Muditha**, Kilduff, Peter, Grier, Bill. (2014). Apparel Technology Integration and Development: Apparel Made for You (AM4U<sup>©</sup>), (Accepted, withdrawn). *Proceedings of the 2014 World Conference on Mass Customization, Personalization, and Co-Creation*, Feb 2-7, 2014, Denmark.
- **Senanayake, Muditha**, (2013). Apparel Mass Customization: Barriers to Strategic Growth. *Proceedings of the International Textile & Apparel Association Annual Conference*, Oct 15-18, 2013, New Orleans, Louisiana.
- **Senanayake, Muditha**, & Class, Mary. (2013). Need Analysis – Information Technology Literacy Skills for Non-Majority College Students. *Proceedings of the International Textile & Apparel Association Annual Conference*, Oct 15-18, 2013, New Orleans, Louisiana.
- **Senanayake, Muditha**, & Little, Trevor. (2011). "Modeling & Simulation of MP-MC Apparel Manufacturing". *Proceedings of the 2011 World Conference on Mass Customization, Personalization, and Co-Creation*, Nov 16-19, 2011, San Francisco, CA, USA.
- **Senanayake, Muditha**. (2011). "Apparel Mass Customization: Barriers to Strategic Growth". (Accepted/withdrawn) *Proceedings of the International Textile & Apparel Association Annual Conference*, Nov 3-6, 2011, Philadelphia. USA.
- **Senanayake, M. M.** & Little, T.J. (2010). Mass Customization: Points and Extent of Apparel Customization, *International Journal of Fashion Marketing and Management*. Volume 14, Issue 2.
- **Senanayake, Muditha** & Vang, Mai. (2010). Analysis of Consumer Barriers to Apparel Mass Customization and Personalization, (Accepted/withdrawn), *Proceedings of the Textile Institute Centenary Conference: Textiles: A Global Vision*, 3-4 Nov, 2010, Manchester, UK.
- Zhang, Yuhan., Raheja, Amar. & **Senanayake, Muditha**. (2010). Digital Camera Based Automated Human Body Measurements. *Proceedings of the IPCV'10 - 14th International Conference on Image Processing, Computer Vision, & Pattern Recognition*, July 12-14, Las Vegas, USA.
- **Senanayake, Muditha**, Zhang, Yuhan., & Raheja, Amar. (2010). Development of a Single Camera Body Scanning System. *Proceedings of the 2010 International Textile and Apparel Association Annual Conference*. Oct 27-30, Montreal, Canada.
- **Senanayake, M. M.** (2009). Apparel Configuration Options for Mass Customized Apparel Manufacturing. *Proceedings of the International Textile and Apparel Association Annual Conference*, Bellevue, Washington.

- **Senanayake, M. M.** & Little, T.J. (2007). Fashion Technology, Infrastructure and Manufacturing Systems Response. Proceedings of the *85th Textile Institute World Conference: "Concept to Consumer"*, Colombo, Sri Lanka.(67 papers accepted out of 250)
- **Senanayake, M. M.** & Little, T.J. (2006). Integrating technology for Apparel Mass Customization. Proceedings of the *8th Annual IFFTI Conference: Fashion in the Digital Age*, Raleigh, NC, USA. (Paper No 8 on CD).
- Little, T. J., & **Senanayake, M.** (2004). Mass-Customization Opportunities in the US Market. Proceedings of the *Xth International Izmir Textile and Apparel Symposium*, Altinyunus, Cesme, Izmir, Turkey
- **Senanayake, M.**, & Little, T. (2001). "Measures" for New Product Development. *Journal of Textile & Apparel, Technology and Management*, Volume 1, Issue 3.
- **Senanayake, M.**, & Little, T. (2001). "Measures" for New Product Development. Proceedings of the *6th Asian Textile Conference – Innovation and Globalization*, Hong Kong. (Paper No 105 on CD).
- **Senanayake, M. M.** (1997). Development of a Computer Simulation Model for Tension Free or Minimum Tension Machine Fabric Laying. Proceedings of the *Engineering Research Unit (ERU) Research for Industry*, University of Moratuwa, Moratuwa, Sri Lanka.

### 3. Refereed Abstracts/ Poster Papers/Undergraduate Research

- **Senanayake, Muditha.** (2014). Need Analysis – Information Technology Literacy Skills of College Students. (Poster Paper). *Proceedings of the 17th annual CSU Symposium on University Teaching*. March 7-8, 2014.CSU San Marcos, CA.
- Munguia, Natalie & **Senanayake Muditha.**, (2012). Fit Customization for Apparel: The Use of Foot Scanning as a Method of Enhancing Consumer's Purchasing Decision. *Proceedings of the Southern California Conference on Undergraduate Research (SCCUR) 2012*, CSU, Channel islands, Camarillo, CA
- Vang, Mai & **Senanayake, Muditha.** (2010). "Consumer barriers to apparel mass customization". *Proceedings of the Southern California Conference on Undergraduate Research (SCCUR) 2010*, Pepperdine University, Malibu CA.
- **Senanayake, M. M.** (2010). Community Service Learning as a Strategy for Improved Learning Effectiveness. (Poster paper). *Proceedings of the 13th CSU Symposium on University teaching*, California State University. San Bernadino, CA.
- Gianessi, Patricia. & **Senanayake, Muditha.** (2009). Analysis of Virtual vs. Real Garment Fitting and Visualization using Advanced Technologies. *Southern California Conference on Undergraduate Research (SCCUR-Nov 2009)*, California State University, Dominguez Hills, Carson, CA. USA.
- Crocker, Kate. & **Senanayake, Muditha.** (2009). Evaluation of Women's Wear to Understand Consumer Preferences for Vanity Sizing. Poster paper presented at the *Southern California Conference on Undergraduate Research (SCCUR- Nov 2009)*, California State University, Dominguez Hills, Carson, CA.
- Juwano, Inanta. & **Senanayake, Muditha.** (2008). The Future of Fashion through Mass Customization: Practices in the US Market. Poster paper presented at the *Southern California Conference on Undergraduate Research (SCCUR – Nov 2008)*, Pomona, CA. USA.

- **Senanayake, M.M., & Little, T.J.** (2003). Mass Customized Apparel manufacturing Model. Proceedings of the 7<sup>th</sup> *Asian Textile Conference*, New Delhi, India.
- King, R. et.al. (2002). *Emerging Apparel Supply Chain Configurations*. Poster paper presented at the National Textile Center Forum, Charlotte, NC, USA.
- Hodgson, T. J. et. al. (2001). *Analysis of Apparel Production Systems to Support Quick Response Replenishment* Poster paper presented at the National Textile Center Forum, Myrtle Beach, NC, USA.

#### 4. Editor Reviewed Trade Publications

- **M. M. Senanayake** and T. J. Little (2002). Management Features: Measures for Product Development. *Textile Asia* Volume XXXIII, Issue 6.

### C. PRESENTATIONS

#### 1. Refereed Paper and Abstract Oral and Poster Presentations

- (2015). Apparel Technology Integration and Development for Purchase Activated Manufacturing. Paper presented at the 8<sup>th</sup> *World Conference on Mass Customization, Personalization, and Co-Creation*, Oct 21-23, Canada
- (2014). Need Analysis – Information Technology Literacy Skills of College Students. Poster Paper presented at the 17<sup>th</sup> *annual CSU Symposium on University Teaching*. March 7-8, 2014. CSU San Marcos, CA.
- (2013). Need Analysis – Information Technology Literacy Skills for Non-Majority College Students. Paper presented at the *International Textile & Apparel Association Annual Conference*, Oct 15-18, 2013, New Orleans, Louisiana.
- (2013). Apparel Mass Customization: Barriers to Strategic Growth. Paper presented at the *International Textile & Apparel Association Annual Conference*, Oct 15-18, 2013, New Orleans, Louisiana.
- (2011). "Modeling & Simulation of MP-MC Apparel Manufacturing". Paper presented at the *2011 World Conference on Mass Customization, Personalization, and Co-Creation*, San Francisco, CA, USA.
- (2010). Development of a Single Camera Body Scanning System. Paper presented at the *2010 International Textile and Apparel Association Annual Conference*. Oct 27-30, Montreal, Canada.
- (2010). Community Service Learning as a Strategy for Improved Learning Effectiveness. Poster paper presented at the 13<sup>th</sup> CSU Symposium on University teaching, California State University. San Bernadino, CA.
- (2009). *Apparel Configuration Options for Mass Customized Apparel Manufacturing*. Paper presented at the International Textile and Apparel Association Annual Conference, Bellevue, Washington.
- (2007). *Fashion Technology, Infrastructure and Manufacturing Systems Response*. Paper presented at the 85<sup>th</sup> Textile Institute World Conference: "Concept to Consumer", Colombo, Sri Lanka.
- (2006). *Integrating technology for Apparel Mass Customization*. Paper presented at the 8<sup>th</sup> Annual IFFTI Conference: Fashion in the Digital Age, Raleigh, NC, USA.
- (2009). *Analysis of Virtual vs. Real Garment Fitting and Visualization and Consumer Acceptance*. Paper presented at the Provost's Symposium on Faculty Scholarship, Cal Poly, Pomona, Fall 09.

- (2008). *Depth, Spread or Continuum of Apparel Mass Customization*. Paper presented at the Provost's Symposium on Faculty Scholarship, Cal Poly, Pomona, Fall 08
- (2003). *Modeling and Analysis of Mass Customized Apparel Manufacturing*. Poster paper presented at the Industry Open House & Poster Competition, College of Textiles, North Carolina State University, Raleigh, NC, USA.
- (1997). *Development of a Computer Simulation Model for Tension Free or Minimum Tension Machine Fabric Laying*. Paper presented at the Engineering Research Unit (ERU) Research for Industry, University of Moratuwa, Moratuwa, Sri Lanka.

## 2. Invited/Keynote Presentations and Panel Discussions

- **Member of the Keynote Panel.** (2012, October,11). *Apparel Made for You (AM4U)-Purchase Activated customized apparel production project*. AAFA-HRLC Fall Conference, Cal Poly, Pomona.
- **Member of the Keynote Panel.** (2012, April 21). *Apparel Made for You (AM4U)-Purchase Activated customized apparel production project*. California Community College fashion Symposium, CA Market Center, LA. CA, USA.
- **Keynote presentation.** (2010, Aug 21). *Developing the Global Executive: Challenges and Opportunities in a Changing World*. Presented (to an audience of corporate executives) at the Excel World, Colombo, Sri Lanka, organized by the Friendlinet (Pvt) Ltd. Sri Lanka.
- **Invited presentation.** (2009, July 30). *Automation in the Apparel Industry and the Use of Computer Applications*. Presented at the Department of Textile and Clothing Technology, College of Engineering, University of Moratuwa, Sri Lanka.
- **Keynote presentation.** (2007, May 31). *Apparel MC: Points & Extents and Industry Practice*. Presented at the 1<sup>st</sup> Annual Symposium of the Department of Apparel Merchandising and Management, California State Polytechnic University, Pomona, CA, USA.
- **Invited presentation.** (2002, March). *Latest developments in textile and apparel technologies*, Presented at the Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka.
- **Invited presentation.** (1995, May). *Leadership role of the graduates in textile and clothing technology for the Sri Lankan Apparel Industry*, Presented at the University New Student Orientation, University of Moratuwa, Sri Lanka

## 3. Other Research Presentations

- (2004, May). *Mixed Mass Production & Mass Customization: Best Practices for Apparel*. Doctoral defense presentation to the faculty and students of the College of Textiles, North Carolina State University, Raleigh, NC, USA.
- (2002). *Mixed Mass Production – Mass Customization Manufacturing Model*. Preliminary research proposal presentation at the College of Textiles, North Carolina State University, Raleigh, NC, USA.
- (2002) *Apparel Assembly Technology: Infrastructure and Manufacturing Systems Response*. Paper presented at the College of Textiles, North Carolina State University, Raleigh, NC, USA.

- (2002). *Information Needed to Drive Apparel New Product Development*. Paper presented at the College of Textiles, North Carolina State University, Raleigh, NC, USA.
- (1997). *Development of a Computer Simulation Model for Tension Free or Minimum Tension Machine Fabric Laying Process*. Presented at the Research Seminar, Saga University, Japan.
- (1994). *Productivity through Total Quality Management*. Thesis presentation at the Dept. of Textile and Clothing technology, University of Moratuwa, Sri Lanka.

## D. RESEARCH AND OTHER GRANTS

### 1. External Grants

- **Senanayake Muditha & Kilduff, Peter.** (2016). 10 year commitment of AIMS360 ERP system software grant to AMM department, Cal Poly, Pomona. \$1,140,000
- **Senanayake Muditha & Kilduff, Peter.** (2011). Work Measurement and Costing: Training & Assessment Tools to Support Compliance in the California Apparel Industry. \$25,000. Sponsor: Department of Labor. Not funded.
- **Senanayake Muditha (PI)** (2010). Need Analysis: Assessing Technology Literacy Skills for Hispanic and other Minority College Students. \$10,000. Sponsor: UC-CSU collaboration grant program. Time period: 2011-13. **Funded.**
- **Senanayake M. M.** (2009). Mass customized apparel manufacturing analysis using computer simulation of ETON Unit Production System. \$ 13362.00. Software and system upgrades from ETON Systems. **Funded.**
- **Senanayake, M. M.** (2007). Assessment and Development of the VMS Portable Bodyscanning System. \$5000.00. Not funded.
- **Senanayake, M. M.** (2004). Textile and Clothing Technology Corporation [TC]<sup>2</sup> – Research to quantify new product development methods– US \$ 8000.00. **Funded.**
- **Senanayake, M. M.** (2003). Interwoven Solutions. Research & Analysis of Textile and Apparel Trade in US, Mexico and Canada. US \$ 10,000. **Funded.**

### 2. Internal Competitive Grants

- **Senanayake, M. M.** (2016). Special Projects for Improving the Class Room Environment (SPICE). Application to Modernize Classroom Equipment: Digital Design and Rapid Prototyping Lab Development: Digital Fabric/Garment Printer. US \$ 26637. Funded (\$25000),
- **Senanayake, M. M.** (2016). Special Projects for Improving the Class Room Environment (SPICE). Application to Modernize Classroom Equipment: Digital Design and Rapid Prototyping Lab Equipment: Digital Embroidery Machine. US \$ 21330.00 **Funded** (College).
- **Senanayake, M. M.** (2015). Provost Teacher Scholar Support Program, Cal Poly, Pomona. US \$ 6030. **Funded**



- **Senanayake, M. M.** (2015). Innovative Approaches to Instruction: Special Projects for Improving the Classroom Experience (SPICE), Cal Poly, Pomona.  
US \$ 8690. **Funded**
- **Senanayake, M. M.** (2014). Faculty Center for Professional Development, Cal Poly, Pomona.  
US \$ 250. **Funded**
- **Senanayake, M. M.** (2014). Presidents Travel Fund, College of Agriculture, Cal Poly, Pomona.  
US \$ 1227. **Funded** (\$550)
- **Senanayake, M. M.** (2013). Service Learning Faculty Fellow Program 2013-14. Center for Community Engagement (CCE), Cal Poly, Pomona. Stipend and mini-grant funding \$1700. **Funded.**
- **Senanayake, M. M.** (2010). Automated body measurement extraction using 2-D photographs. Research, Scholarship and Creative Activity (RSCA) 2010-11 grant program, Cal Poly, Pomona. \$4999.00. **Funded.**
- **Senanayake, M. M.** (2010). Presidents Travel Fund, College of Agriculture, Cal Poly, Pomona.  
US \$ 1810.79. **Funded** (\$1680.79)
- **Senanayake, M. M.** (2009). Presidents Travel Fund, College of Agriculture, Cal Poly, Pomona.  
US \$ 1054. **Funded** (\$400)
- **Senanayake, M. M.** (2009). Body measurement extraction for fit customization using virtual human modeling from photographs. Research, Scholarship and Creative Activity (RSCA) 2009-10 grant program, Cal Poly, Pomona. \$5642.00. Not funded.
- **Senanayake, M. M.** (2008). Presidents Travel Fund, College of Agriculture, Cal Poly, Pomona.  
US \$ 870. **Funded** (\$350)
- **Senanayake, M. M.** (2008). Development of a single camera portable body scanner; Phase 1. Research, Scholarship and Creative Activity (RSCA) 2008-09 grant program, Cal Poly, Pomona.  
US \$ 4962.00. Not funded.
- **Senanayake, M. M.** (2008/09). Mass customized apparel manufacturing analysis using computer simulation of ETON Unit Production System. Award from Faculty Professional Development Mini-Grant Program, Faculty Center for Professional Development and College of Agriculture Deans Fund, Cal Poly, Pomona, CA. US \$2995.00. **Funded** (\$ 2000).
- **Senanayake, M. M.** (2008). Hybrid or Online Course Development, Faculty Winter Institute, Instructional and Information Technology –Learning, Cal Poly, Pomona, CA.  
US \$ 1500.00. **Funded.**
- **Senanayake, M. M.** (2007). Presidents Travel Fund, College of Agriculture, Cal Poly, Pomona.  
US \$ 890.00. **Funded** (\$ 400)
- **Senanayake, M. M.** (2007/08). Integration of 3-D Body Scan data with 2-D CAD system. Award from Faculty Professional Development Mini-Grant Program, Faculty Center for Professional Development, Cal Poly, Pomona, CA. US \$ 1364.00. **Funded** (\$ 600).
- **Senanayake, M. M.** (2007/08). Points and Extent of Apparel Mass Customization. Research, Scholarship, and Creative Activity (RSCA) 2007-08 grant program, Cal Poly, Pomona.  
US \$ 4915. Not funded.
- **Senanayake, M. M.** (2008). Analysis of Apparel Mass Customization Practices. The International Center 2008 Travel Grant. Cal Poly, Pomona, CA. US \$ 1980. Not funded.

- **Senanayake, M. M.** (2006). Travel Grant to present Paper at the 85th Textile Institute World Conference: "Concept to Consumer" in Colombo, Sri Lanka. Faculty Development Award, Kansas State University. US \$ 2300.00. **Funded**
- **Senanayake, M. M.** (2006). Faculty Development Award, College of Human Ecology and Department of ATID, Kansas State University. US \$ 1200.00. **Funded.**

## IV. TEACHING

### A. New Course Development

- IAM 560: Advanced Technologies in Fibers, Textiles and Apparel (4)
- IAM 653: Apparel Supply Chain Management & Logistics (4)
- IAM 685 Masters Research Proposal (member of the group to develop course)
- IAM 695: Applied Research Project (member of the group to develop course)
- AMM 260/L Textiles Fabrication (3/1)
- AMM 299: Apparel Operations Management (4)

### B. Major Course Restructuring

- AMM 381: Apparel Production Lab (1)
- AMM 481: Advanced Apparel Production (3/1)
- AMM 453: Apparel Sourcing and Supply Chain Management (3)
- AMM 492/A: Apparel Product Development Simulation (2/2) (Capstone Course – team learning)

### C. Courses Taught

#### 1. Department of Apparel Merchandising and Management, California State Polytechnic University, Pomona

- AMM 101: Fashion Industry (3)
- AMM 200/400 Special Topics/Independent Studies (2/3)
  - Lean manufacturing of apparel
  - Mass customization practices in the US
- AMM 299: Apparel Operations management (4)
- AMM 301/L: Apparel Product Analysis (2) and Lab (1)
- AMM 381/L: Apparel Production I (3) and Lab (1)
- AMM 442: Internship (3)
- AMM 443A: Apparel Market Analysis and Reporting (2)
- AMM 451: Apparel Supply Chain Management (3)
- AMM 461: Senior Research project I (2)
- AMM 462: Senior Research project II (2)
- AMM 481/L: Advanced Apparel Production (3) and Lab (1)
- AMM 453: Apparel Sourcing & Supply Chain Management
- AMM 492/A: Apparel Product Development Simulation (2) and Activity (2) (Capstone Course –team learning)

#### 2. Department of Apparel, Textiles and Interior Design, Kansas State University

- AT 840 Textile and Apparel Product Development
- AT 645 Private Label Apparel Product Development (Capstone Course – 100% team based learning)
- AT 880: Physical Analysis of Textiles

- AT460: Apparel and Textile Evaluation

### 3. Department of Fashion Marketing and Management, Berkeley College, New Jersey

- FAS 101: Introduction to Fashion Business
- FAS222: Product Development
- FAS 215: Textile Analysis
- FAS210: Buying Procedures

### 4. Department of Textile and Apparel Technology and Management, NC State University

- TTM 510L: Apparel Technology Management Lab
- TAM 416L: Apparel Production III Lab
- TAM 316L: Apparel Production I Lab

### 5. Department of Textile and Clothing Technology, University of Moratuwa, Sri Lanka

BS Engineering in Textile & Clothing Technology:

- UTT 306: Garment Production Systems
- UTT 407: Equipment Technology
- UTT 407 L: Equipment Technology Lab
- UTT 406: Production Organization & Management

Industry Extension Courses:

- Merchandising – Also course Coordinator
- Quality Assurance & Control
- Process Control
- Work Study – Method Study & Time Study

### 6. Summary of Course Evaluations

Course	AMM 101 Fashion Industry	AMM 299 Apparel Operations Management	AMM 301/L Apparel Product Analysis	AMM 381/L Apparel Production I	AMM 443A Apparel Market Analysis & Reporting	AMM 451 Apparel Supply Chain Management
Latest Quarter Taught	Spring 12	Fall 08	Fall 11	Winter 16	Spring 13	Winter 11
Final Overall Course Average	1.4	2.2	1.9	1.66	2.2	1.8
Course	AMM 453 Apparel Sourcing & SCM	AMM 461 Senior Research Project I	AMM 462 Senior Research Project II	AMM 481/L Advanced Apparel Production	AMM 492/A Apparel Product Dev. Simulation	
Latest Quarter Taught	Fall 13	Fall 12	Spring 13	Winter 16	Spring 15	
Final Overall Course Average	1.7	1.7	1.8	1.64	1.55	

Note: The student instructional assessment scale represents Very Good (1) and Very Poor (5). The final overall course average is an average of 18 questions.

## **D. Workshops and Other Teaching**

- *Developing the Global Executive: Challenges and Opportunities in a Changing World. 4 Hour Workshop* designed and delivered to corporate executives at the Excel World, Colombo, Sri Lanka, organized by the Friendlinet (Pvt) Ltd. Sri Lanka. Aug 21,2010
- *Automation in the Apparel Industry and the Use of Computer Applications.* Three-hour lecture presented at the Department of Textile and Clothing Technology, College of Engineering, University of Moratuwa, Sri Lanka. July 30, 2009.
- *Global Sourcing.* 1 Hour lecture presentation to AMM 101: Fashion Industry class at the dept. of AMM, Cal Poly, Pomona, USA. Nov 17, 2008.

## **E. Graduate Advising**

### **1. Graduate Committee Co-Chair**

- MS - Eva Chang-Person (Urban and Regional Planning). Drivers for site location decisions of apparel entrepreneurs and apparel companies. Cal Poly, Pomona. 2013-2014
- MS - Noura Albarakati (Computer Science). Generating 3-D Avatar from body measurements, Cal Poly, Pomona, CA, USA. 2012-2013
- MS - Yuhan Zhang (Computer Science). Studies of automated human body measurement extraction from images, Cal Poly, Pomona, CA, USA. 2009-2010

### **2. 11<sup>th</sup> McNair Scholarship Program Chair**

- BS- Mai Wang, Consumer barriers to the acceptance of apparel mass customization, Cal Poly, Pomona, CA, USA. 2010.

## **V. PROFESSIONAL ACTIVITIES**

### **A. Membership in Professional Associations**

- Member, American Association of Textile Chemists and Colorists (AATCC), 2016
- Nominated for Kellogg-Voorhis Chapter of Gamma Sigma Delta honor society, College of Agriculture, Cal Poly, Pomona, May 2010
- Member, American Apparel and Footwear Association (AAFA), 2009 - Present
- Committee member, Human Resource Leadership Council, AAFA, 2009 - Present
- Member, International Textile and Apparel Association (ITAA), 2009-Present
- Member, International Institute of Mass Customization and Personalization. (IIMCP), Technische Universitaet Muenchen, Munich, Germany. Oct 2007 – Present
- Member, Mass Customization and Personalization Group (MCPC) at MIT. 2007-Present
- Member, The Hong Kong Research Institute of Textile and Apparel (HKRITA), HK, 2006 - Present
- Member, University of Moratuwa Textile Association (UMTA), Sri Lanka 2005-Present
- Chartered Member, The Textile Institute, UK, 2003- Present
- Treasurer, The Textile Institute, Sri Lanka Section, 1998/1999
- Committee Member, Sri Lanka Apparel Institute, 1997/1999

### **B. Professional Service**

- 2017 AATCC C2C student merchandising competition organizing committee, 2016

- Conference Chair/Organizer, AAFA, HRLC Fall Conference, Cal Poly, Pomona. 2012
- Cal Poly, Pomona Representative for the YMA-Fashion Scholarship Fund (FSF). 2012 – present
- Committee Member of the Development Committee, International Textile & Apparel Association, 2011-present
- Committee Member of the International Relations Committee, International Textile & Apparel Association, 2010-present
- Cal Poly, Pomona Representative for Human Resource Leadership Council (HRLC) of American Apparel and Footwear Association (AAFA), 2009 – present
- Chartered Associateship (*C Text. ATI*), The Textile Institute, UK – 2003- present
- Treasurer, The Textile Institute, Sri Lanka, 1998-1999
- Committee Member, The Sri Lanka Apparel Institute, 1997/1999

## C. Academic Service

### 1. Ad hoc Book or Book Chapter Reviews

- Book Chapter, “Production Planning, Quality Control and Shipping, Fashion for Profit, From design concept to Apparel Manufacturing”, Frances Harder, 8<sup>th</sup> Edition,

### 2. Ad hoc Journal Manuscript Reviews

- Clothing and Textile Research Journal – 2013. “Female Apparel Consumers’ Understanding of Body Size and Shape: Relationships among Body Measurements, Fit Satisfaction and Body Cathexis.”
- Clothing and Textile Research Journal – 2012. “Female Apparel Consumers’ Understanding of Body Size and Shape: Relationships among Body Measurements, Fit Satisfaction and Body Cathexis.”
- Clothing and Textile Research Journal – 2011. “Older Women’s Clothing Fit Concerns and Their Attitudes toward Use of 3D Body Scanning”
- Journal of Fashion Marketing and Management – 2010. Improving Garment Fit and Function through Ease Quantification.
- Journal of Fashion Marketing and Management – 2009. Understanding Competitive Advantage in Thailand’s Apparel Industry: Opportunities and Challenges of Globalization. Re-review.
- Journal of Fashion Marketing and Management - 2009. Understanding Competitive Advantage in Thailand’s Apparel Industry: Opportunities and Challenges of Globalization.

### 3. Ad hoc Conference Proceeding Manuscript Reviews

- International Textile and Apparel Association (ITAA) conference. Santa Fe, New Mexico, 2015
  - Potential Impact of the Trans-Atlantic Trade and Investment Partnership (T-TIP) on Related Textile and Apparel Trade Flows
  - Impact of International Trades: Historic Evidences on Korean Society during the 1890s
  - The Invisible Labor: Understanding the Role of Indian Apparel Married Women Employees through the Lenses of Theory of Allocation of Time
- International Textile and Apparel Association (ITAA) conference. Charlotte, North Carolina, 2014
  - Impact of the Trans-Pacific Partnership on Textile and Apparel Trade in the Pacific Rim: A Quantitative Analysis
  - Used Clothing Trade: Mitumba or Vintage Clothing

- Online Purchasing Agents in China
- International Textile and Apparel Association (ITAA) conference. New Orleans, Louisiana. 2013
  - The Textile Industry in Ghana: A look into Tertiary Textile Education and its Relevance to the Industry
  - Impact of the Trans-Pacific Partnership on Textile and Apparel Trade in the Pacific Rim: A Computable General Equilibrium Approach
  - Key Resources of the Indian Apparel Export Firms as Described by Firm Managers
- International Textile and Apparel Association (ITAA) conference. Hawaii. 2012
  - Distinctive Pattern of Internationalization Between Apparel and Information Technology Industry: Uppsala Model Approach
  - The *Global Connections Project, Version 2.0*. Continuing the Focus on Understanding Global Concepts and Cultural Diversities.
  - Exploring Key Resources of India's Apparel Export Firms' Competitive Advantages.
  - The United States-Korea Free Trade Agreement and Its Impacts on China's Textile and Apparel Exports to the United States
- Mass Customization & Personalization and Core Creation International conference. CA. 2011.
  - Why customization of footwear is not fit for masses
  - Customization in apparel design
  - Fostering Mass Customization adoption through a suitable specialized Open Innovation platform

#### **4. Institutional Service And Administration**

##### **University**

###### **California State Polytechnic University, Pomona, USA**

- Professional Leave Committee, Standing Committee of the University Academic Senate, 2016-18
- Instructional Technologies Working Group, Committee Member. Standing Committee of the University Academic Senate, 2012-to date
- Faculty Affairs Committee, Committee Member. Standing Committee of the University Academic Senate, 2011/12
- Academic Affairs Committee, Committee Member. Standing Committee of the University Academic Senate, 2010/11
- AVP for Research 3 Year Review Committee, 2010
- Academic Senate - IT Governance – Class Room Technology Working Group, Committee Member 2009/2010
- Technology Committee, Committee Member. Standing Committee of the University Academic Senate, 2008/2009, 2009/2010
- Election and Procedures Committee, Committee Member. Standing Committee of the University Academic Senate, 2009/2010

###### **North Carolina State University, Raleigh, NC. USA**

- Chancellor's Liaison Committee, 2003
- Mayor. E.S. King Village Council, Graduate Student Family Housing, 2002-2003
- University standing committee on University Student Health, Member, 2002/2003

##### **College**

### **College of Agriculture, California State Polytechnic University, Pomona, USA**

- Semester conversion, Curriculum Committee Member, 2014-18
- Curriculum committee, Committee Member, 2011/12 – to date
- 75<sup>th</sup> Anniversary committee, Committee Member, 2012/13
- Advisor of the year selection committee, Committee Member, 2012/13
- Assessment committee, Committee Member, 2010/11, 11/12
- Spring 2010 graduation commencement coordinator for AMM department, 2010
- Proposal review committee of the College of Agriculture Provenzano Professional Faculty Development program for Food Marketing and Agribusiness Management department, Committee Member - 2010
- College Strategic Planning Committee for Core Courses, Committee Member, 2008/2010

### **College of Human Ecology, Kansas State University, Manhattan, KS, USA**

- Technology Committee, Committee Member, 2006

### **College of Textiles, NC State University, Raleigh, NC, USA**

- Textile Association of Graduate Students (TAGS), President, 2002-2003
- Textile Association of Graduate Students (TAGS), Vice President, 2001-2002
- International Student Departmental Ambassador, 2001-2003
- Poster Competition, Industry Open House, Founding member, 2003

## **Department**

### **Apparel Merchandising & Management, California State Polytechnic University, Pomona, CA, USA**

- Chair, Five year review committee, 2015 – to date
- Chair, Semester conversion curriculum committee, 2014-to date
- Member, Student Assessment committee, 2011 – to date
- Member, Chair review committee, 2012
- Chair, Curriculum development committee, 2010-to date
- Chair, AAFA five-year program review committee, 2011.
- Department representative, Human Resource Leadership Council (HRLC) of American Apparel and Footwear Association (AAFA) for program endorsement, 2009 – to date
- Committee Member, Five year program review committee, 2009-2010
- Chair, Department chair review committee, 2009
- Co Chair, Library resource development, 2009
- Coordinator, Department website, 2009
- Responsible for new 3-D product development technology purchase, 2009
- Member, Student scholarships committee, 2008 – to date
- Responsible for ETON Unit Production System maintenance and upgrades, 2008 – to date
- Responsible for Apparel Production Lab equipment purchase, upgrades and modifications, 2008 – to date
- Co Chair/Committee Member, Masters degree program development, - 2007-to date
- Member, Faculty search committee, 2007, 2010, 2012, 2013, 2014, 2015
- Responsible for TC2 body scanner maintenance and upgrades, 2007 - to date

### **Apparel, Textile and Interior Design, Kansas State University, Manhattan, KS, USA**

- Search Committee for Head of ATID, Member, 2006/2007
- Social Committee, Member 2007
- Technology Committee, Member, 2007
- Exhibition Committee, Member, 2007
- Historic Costume & Textile Museum Accession Committee, Member, 2007

## **Textile and Clothing Technology, University of Moratuwa, Katubedda, Sri Lanka**

- Implementation of the Bachelor of Design degree program, Dept. Coordinator, 1999
- Course Coordinator - Extension course in Merchandising
- Organizer, new student welcome program, 1997
- Department representative, University news letter

## **Community**

- Volunteered to assist in the fund raising event for AAFA Educational Foundation Scholarship Fund, FIDM, LA. Sept 30, 2009.
- Donation of thermal baby products to the neo natal unit of the Pomona Valley hospital produced through a student lab project (AMM 381L: Apparel Production Lab), Spring 2008- present.

## **VI. AWARDS AND HONORS**

- Sabbatical at AM4U Inc., Fall 2014.
- Faculty Fellow 2013-2014, Center for Community Engagement, Cal Poly, Pomona
- Nominated for Teacher of the Year Award, 2013-2014, College of Agriculture, Cal Poly Pomona
- President's Travel Award, College of Agriculture, Cal Poly, Pomona – 2013/14
- 2013-14 Service Learning Faculty Fellow, The Center for Community Engagement, Cal Poly, Pomona
- Nominated for the ITAA Council ballot for the position of Member At Large. 2013
- Teacher of the Year Award, 2011-2012, AMM department, Cal Poly Pomona
- Mack H. Kennington Advisor of the Year Award (2011), College of Agriculture, Cal Poly, Pomona.
- The Honor Society of Agriculture GAMMA SIGMA DELTA. Nominated for membership in recognition of high scholarship, outstanding achievement or service, May 25, 2010.
- President's Travel Award, College of Agriculture, Cal Poly, Pomona – 2010/11
- President's Travel Award, College of Agriculture, Cal Poly, Pomona – 2009/10
- President's Travel Award, College of Agriculture, Cal Poly, Pomona – 2008/09
- Faculty Professional Development Mini -Grant Award, Cal Poly, Pomona – 2008/09
- Faculty Winter Institute, Instructional and Information Technology –Learning Stipend for Hybrid or Online Course Development, Cal Poly, Pomona - 2008
- President's Travel Award, College of Agriculture, Cal Poly, Pomona – 2007/08
- Faculty Professional Development Mini -Grant Award, Cal Poly, Pomona – 2007/08
- Faculty Development Award, Kansas State University, USA - 2006
- Best Doctoral Dissertation Award, College of Textiles, NCSU, Raleigh, NC, USA - 2004
- Chartered Associateship (*C Text. ATI*) by The Textile Institute, UK - 2003
- Full Academic Scholarship: Fall 1999 – Spring 2003, North Carolina State University, Raleigh, NC, USA
- Silver and Bronze Medal winner for Table Tennis and Tennis, Sri Lanka National University Games – 1992
- Winner - Inter school debating contest to commemorate the International Year for Children, Sri Lanka -1979

## **VII. PROFESSIONAL DEVELOPMENT**

### **1. Technology Experience, Training And Certifications**

- Adobe Illustrator/Photoshop



- Instructional: Blackboard version 7 and 9, Hybrid/Online course development
- Certification: ERP/Information Systems: Apparel Information Management System (AIMS360)
- CAD/CAM programs: TukaCad, TukaMark, Optitex, Gerber, Zund digital cutting, ETON UPS
- Body scanning: TC<sup>2</sup> NX16 body scanner, single camera body measurement extraction
- Sourcing: Sourcing Simulator from TC<sup>2</sup>, Lectra Mikalis
- Production: TC2 TeamMate, Most sewing, pressing, fusing, fabric cutting, spreading machines
- Testing: Most testing machines (Strength/elongation, Abrasion resistance, Crocking, Color/light fastness, Stiffness/hand/wrinkle recovery, Flammability, Dimensional stability, Fiber/Yarn/Fabric Properties)
- Weaving (power looms, water jet, air jet, rapier, jacquard, dobby), Knitting (weft-circular & flat bed, and warp)
- Six Sigma Black Belt
- Practitioner, General Sewing Data (GSD)

## 2. Courses, Workshops and Other Training

- Advising for Semester Conversion, Semester Conversion Advising Forum, CPP, 11/20/2015
- Grants conference webcast series for “Minority Including Hispanic Serving Institutions” by the NSF. 11/7/14
- Putting the act into active learning: engaging students with concept based, skits by Karen Thompson, CSU, Sonoma. 4/14/12
- Student presentations by design: creating speech assignments that you all enjoy grading, Jennifer Lynch & Terri Metzger, CSU San Marcos. 4/14/12.
- Lessons learned from incorporating learning strategies in a hybrid online course, Phil Rosenkrantz, Cal Poly, Pomona. 4/14/12
- Introduction to Web of Science faculty workshop, Cal Poly, Pomona. 2/21/12
- An Unusual Testing Technique, Cal Poly, Pomona. 2/16/12
- Avoiding Plagiarism Workshop for faculty and staff, Cal Poly, Pomona. 1/12/12
- Publish and Flourish Workshop, Cal Poly, Pomona. 4/22/11
- Teaching with the *New York Times*, Cal Poly, Pomona. 4/13/11
- Introduction to Black Board 9.1, Cal Poly, Pomona. 4/12/11
- Faculty Search Guidelines Workshop, Cal Poly, Pomona. 1/25/2011
- IRB training and re-certification, Collaborative Institutional Training Initiative (CITI), Spring 2010
- IRB application approval: Consumer barriers to the acceptance of apparel mass customization
- IRB application: Automated body measuring system for custom-fit clothes
- “Student Generated Digital Content (using Apple iMovie)” co-sponsored hands-on workshop by eLearning Dept of Cal Poly, Pomona with Apple, June 23, 2010
- Work shop on “An introduction to SoftChalk (instructional software that enables user to create interactive web lessons for learning)”, eLearning, Cal Poly, Pomona, June 21, 2010
- Creating effective rubrics to assess programs and engage students in their own learning by Dr. Dannelle D. Stevens, Professor of Curriculum and Instruction, Portland State University sponsored by the Academic Affairs Assessment Implementation Task Force, Cal Poly, Pomona. May 25, 2010.
- “Transitioning to an online world using HyFlex (Hybrid+Flexible) courses to bridge the gap”, Provost’s Symposium on Faculty Teaching, Cal Poly, Pomona, April 16, 2010
- Using “Echo360 instructional software system (enables instructors to capture and provide class recordings for later viewing)”, eLearning, Cal Poly, Pomona, Spring 2010
- Optitex PDS system training by Optitex, USA, Spring 2010
- Workshop on “Searching Grant Databases by Kristen Torguson (Grants & Contracts Manager, City of Hope) & Sara Bortz (Cal Poly, Pomona), March 18, 2010
- Size USA group Webinar that discussed the body scanning and measurement standard development in USA, Fall 09
- Introduction to Blackboard version 9, Cal Poly, Pomona, December 8, 2009
- Workshop on “Successful Proposal Design” by Dr. Miriam Fultz, Desertfrost Consulting Group, Cal Poly, Pomona, December 4, 2009

- Teacher-Scholar Model for Cal Poly, Pomona, Faculty Center for Professional Development, Dec 3, 09
- Introduction to SPSS, Cal Poly, Pomona. Winter 09.
- Certification for Apparel Information Management System (AIMS) from AIMS Technology Solutions, January 2009.
- NSF undergraduate research funding seminar, Cal Poly, Pomona, Fall 08.
- Adobe Connect to learn how to conduct online training demonstrations, Cal Poly, Pomona, Fall 08
- Hybrid and Online Course Development, Faculty Winter Institute, Instructional and Information Technology –Learning, Cal Poly, Pomona, CA. December 16-19, 2008
- RTP – Retention, Tenure and Promotion workshop organized by the Faculty Center for Professional Development, Cal Poly, Pomona, Oct 3, 2008.
- Reading + Writing = Learning, workshop organized by the Faculty Center for Professional Development, Cal Poly, Pomona, Sept 17-19, 2008.
- “Writing Winning Grants”, broad cast work shop organized by the Office of Research and Sponsored Programs, Cal Poly, Pomona. Sept 15, 2008
- Catch the Wave: Accessible Technologies, workshop organized by the Faculty Center for Professional Development, Cal Poly, Pomona August 14, 2008
- Second Life: Strange and wonderful virtual world-how can you use this in your class by Dr. Tresia Ruby, Faculty Center for Professional Development, Cal Poly, Pomona, April 17, 2008
- PLM: The opportunities, challenges and lessons learned, Barbara Sorkin, International Textile Group; Jerry O’Connor, Nokona Baseball Factory; Michael Blitstein, S. Rothchild, April 8-10, 2008
- “The value network: A competitive advantage in the extended supply chain” Tradecard, April 8-10, 2008
- Instructional software: How to set up a Blackboard course in 2 hours, work shop organized by the Instructional and Information Technology Department, Cal Poly, Pomona, April 4, 2008
- Transform your business with integrated PLM and global sourcing solutions, Fred Isenberg, NGC Computing, April 2, 2008
- Get board from your graphics, Jill M Simmons, Lectra Systems, April 2, 2008
- Product development for a vertically integrated manufacturer and retailer using technology to grow, Tory Lowitz, American Apparel, April 2, 2008
- From tech pack to final sample, Helen Armstrong ,Author; Maribel Diaz ,Timex Group; Ram Sareen, Tukatech, April 2, 2008
- Attending the PAD CAD training session at GCL Distribution, LA – March 27, 2008
- Attending the PAD CAD training session at Cal Poly, Pomona – March 20, 2008.
- Attending the Tukamark CAD training session at TukaTech, Inc., LA - February 2008
- Starting an Apparel Business – From design to Apparel Manufacturing by Frances Harder, Founder and President of Fashion Business Inc., February 2008.
- Pre-RTP (Retention Tenure and Promotion) work shop, workshop organized by the Faculty Center for Professional Development, Cal Poly, Pomona, Jan 18, 2008.
- Fridays for new faculty: support for research, scholarship and professional development. Meetings with Cal Poly Foundation, Office of Research and Sponsored Programs, and office of Research and Graduate Studies, Nov 16, 2007
- Attending the industry event: launching of new PAD software version 4.8, Apparel Mart, LA, November, 2007
- Apparel Industry CAD software program: TukaCad. Attending a training session at TukaTech Inc., LA, October, 2007
- Body scanning software (TC2) program. Attending the training session at Cal Poly, Pomona - October, 2007
- Interactive learning and clickers, workshop organized by the Faculty Center for Professional Development at Cal Poly, Pomona, October 17, 2007
- Tapping the Technology Trend in Teaching, College of Human Ecology Fall Forum, KSU, January 10, 2007
- Excellence in Teaching and Learning: Teachers As Learners, Fourth Annual K-State Teaching Renewal Retreat, January 8, 2007
- Developing New Faculty Scholars Program, College of Human Ecology, KSU, Fall-Spring, 2006/2007
- New Faculty Institute: New faculty development, KSU, Fall/Spring 2006/2007
- Professional Certification: Practitioner - General Sewing Data (GSD)

- Six Sigma Black Belt certification, College of Textiles, NC State University, 2004
- University Certificate Course in Teaching in Higher Education, Staff Development Center, University of Colombo, Sri Lanka organized by the Commonwealth Secretariat, 1998
- Accessing Information, workshop organized by the Sri Lanka Association for Advancement of Science, 1998
- DICS (Diploma in Computer Studies), IDM Computer Studies Ltd., Colombo, Sri Lanka, 1992
- Seminar on General Management, World University Service, Sri Lanka, 1992
- National Certificate In English, Department of Examinations, Sri Lanka, 1988
- Seminar/Workshop on Production Planning & Control, Japan Sri Lanka Technical & Cultural Association. 1997
- Sri Lanka-Japan Production Management Training Course, The Association for Overseas Technical Scholarship, Japan, 1997

### 3. Conferences, Trade Exhibitions and Professional Events Attended

- PolyTeach: technology + the innovative university conference, Cal poly, Pomona. April 29, 2016.
- Green is the new black: Sustainability in Fashion conference, The Fashion Law Project, Loyola Law School, Los Angeles. April 15, 2016.
- Annual Gerber Software Conference “Ideation 2015” Oct 28-30, 2015, Las Vegas. NV
- The 8<sup>th</sup> World Conference on Mass Customization, Personalization and Co-Creation (MCPC-2015), Montreal, Canada, Oct 20-22, 2015
- Fashion in Focus, A gathering of Designers + industry, The CSU5: Supporting Business, Economic and Community Development in Greater Los Angeles, Oct 16, 2015
- 17<sup>th</sup> annual CSU Symposium on University Teaching. March 7-8, 2014. CSU San Marcos, CA.
- 4<sup>th</sup> International Conference & exhibition on 3D Body Scanning Technologies, Long Beach CA. 2013
- International Textile and Apparel Association (ITAA) Annual Conference, New Orleans, Fall 2013.
- California Community College Fashion Symposium, March, 2012
- 15<sup>th</sup> Annual CSU Symposium on university Teaching and Learning by Design, April 14, 2012, Cal Poly, Pomona.
- Polyteach – Technology + the Innovative University Teaching conference, April 13, 2012, Cal Poly, Pomona
- American Apparel and Footwear Association (AAFA) Human Resource Leadership Council (HRLC) meeting at VF Licensed Sports Group, Tampa FL, Winter 2012.
- 2011 World Conference on Mass Customization, Personalization, and Co-Creation: *Bridging Mass Customization & Open Innovation*, November 16-19, 2011, San Francisco.
- American Apparel and Footwear Association (AAFA) Human Resource Leadership Council (HRLC) meeting at TC2 NC, Winter 11 [Industry visit to Cotton Inc, Work shop titled Innovation by Underarmor Inc.
- American Apparel and Footwear Association (AAFA) Human Resource Leadership Council (HRLC) meeting at FIT, NY, Fall 10 [Work shops attended - Cycle time reduction in the supply chain]
- International Textile and Apparel Association (ITAA) Annual Conference, Montreal, Canada, Fall 10.
- Stories of Successful Teaching and Learning conference, Cal Poly, Pomona
- Provost's Symposium on faculty Scholarship & Teaching, 12/13/10
- SPESA EXPO 2010, TECHTEXTIL NORTH AMERICA and ATME-I/MEGATEX trade shows, Georgia World Congress Center, Atlanta, GA. May 18-20, 2010.
- 13th CSU Symposium on University Teaching, CSU San Bernardino, CA, April 24, 2010
- Special Triple Event: Provost's Symposium on Faculty Teaching, Faculty Day and 20<sup>th</sup> Anniversary of the Faculty Development Center, Cal Poly, Pomona, April 16, 2010
- Provost's symposium on faculty scholarship, Cal Poly, Pomona, December 11, 09
- Southern California Conference on Undergraduate Research (SCCUR), Carson, CA. Nov 21, 2009
- International Textile and Apparel Association Annual Conference, Bellevue, Washington, October 09.
- Human Resource Leadership Council (HRLC) meeting, AAFA at FIDM, LA, Summer 09
- Material World Trade Show and Technology Solutions, Miami, FL. Spring 09.
- Provost's Symposium on Faculty Teaching, Cal Poly, Pomona. CA. Spring 09.
- Provost Symposium on Faculty Scholarship, Cal Poly, Pomona, CA. December 15, 2008.

- Southern California Conference on Undergraduate Research (SCCUR), Pomona, CA. USA. Nov 22, 2008
- SIGGRAPH: 35<sup>th</sup> International conference and exhibition on computer graphics and interactive techniques, LA. August 11-15, 2008.
- Material World Global Apparel Industry Trade Exhibition and Technology Solutions show, Miami FL, April 8-10, 2008.
- 2008 Apparel Tech West conference, FIDM, Irvine, CA, April 2, 2008
- MAGIC Apparel industry trade show, Las Vegas Convention Center, Las Vegas, February 2008.
- Mass Customization and Personalization (MCPC) – Open Innovation, 2007 World Conference on MCPC, Innovation and Research Conference, MIT Cambridge/Boston, October 7-10, 2007
- 85th Textile Institute World Conference: "Concept to Consumer", Colombo, Sri Lanka, 2007.
- 8th Annual IFFTI Conference: Fashion in the Digital Age, Raleigh, NC, USA, 2006.
- Material World Global Apparel Industry Trade Exhibition and Technology Solutions show, Miami FL, 2006
- Interstoff Asia, International Fabric/Trend show, Hong Kong exhibition & convention center, Hong Kong, 2005.
- National Textile Center Forum, Charlotte, NC, USA, 2002.
- National Textile Center Forum, Myrtle Beach, NC, USA. 2001.

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## **LINDA BARNES TUCKER**

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### **Education**

Doctor of Education in Organizational Leadership, University of La Verne, La Verne, CA. Dissertation Title: Transfer and Articulation Issues between California Community Colleges and California State University.

Graduate coursework towards Master of Business Administration in Marketing and Management, National University, San Diego, CA

Masters of Science in Family Studies & Consumer Sciences; emphasis in Marketing and Fashion Merchandising, San Diego State University, San Diego, CA. Thesis title: Competency Identification and Articulation of Fashion Merchandising Programs

Bachelor of Fine Arts; Fashion Design major, Retailing minor, Stephens College, Columbia, MO

### **Teaching Experience**

Apparel Merchandising & Management Department, California State Polytechnic University Pomona, Pomona, CA. Lecturer (full-time), 2005 – present.

Committee Responsibilities:

AMM general education curriculum, Chair.

Purpose is to align SLOs with University standards for general education.

AMM Semesterization Project, Committee member.

Conversion of 12-quarter based curriculum to 8-semester curriculum.

AMM Advisory Board, Member

Participation with industry professionals in program development, review, & improvement.

Worked on WASC accreditation reviews and AAFA compliance reports.

Courses taught: Retail Fashion Analysis; Visual Merchandising Analysis; Apparel Importing and Exporting; Textile Specification Buying; Apparel Merchandise Buying; Fashion Retailing Simulation I, II, & III; Apparel Product Analysis; Apparel Production; Culture, People, and Dress; Apparel Wholesale Operations; Apparel Retail Merchandising Strategies, Apparel Industry Leadership, Strategies in International Retailing.

Field trips:

Bi-annual trip to the MAGIC trade show in Las Vegas

Market week visits to showrooms in California Market Center, The New Mart, The Cooper Design Space, & The Gerry Bldg.

## **LINDA BARNES TUCKER**

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Fashion Institute of Design & Merchandising, Los Angeles & Orange County Campuses, Los Angeles & Irvine, CA. Instructor (part-time), 2004 – 2008.

Courses taught: Fashion Entrepreneurship; Intro to Manufacturing & Merchandising; Wholesale Selling; Sourcing & Inventory Management; Merchandising Strategies; Professional Practices for Fashion Design.

Brooks College, Long Beach, CA. Department Chair, General Education and Fashion Merchandising Program (Associate of Arts). 1994 – 2003.

Direct responsibility for WASC accredited academic program including curriculum development and revision; faculty hiring and evaluation; and student counseling and retention. Wrote application & curriculum for ACICS accreditation for Bachelor of Fine Arts degree proposal.

Courses taught: Alternative Retailing; Apparel Evaluation; Buying; Creative Selling; E-Commerce; Intro to Fashion.

San Diego State University, San Diego, CA. Instructor, Family Studies & Consumer Sciences, (full-time). 1985 – 1987.

Courses taught: Consumer Issues in Clothing & Textiles; Fashion Merchandise Analysis; Fashion Merchandise Budget & Planning; Fashion Merchandising Internship; Fashion Merchandising Seminar.

Southwestern College, Chula Vista, CA. Program Coordinator & Instructor, 1974 – 1985.

Responsible for curriculum development, Selection of & participation with advisory committee, student job placement, supervision of faculty, & teaching in Business & Technology Divisions.

Courses taught: Clothing & Textiles; Tailoring; Patternmaking; Draping; Visual Merchandising; Fashion Merchandising; Marketing; Advertising; Small Business Management.

### **Business Experience**

Linda Tucker & Associates, Freelance Special Events Planner, Los Angeles & San Diego, CA. 2003 – 2006.

Responsibilities included prospecting clients, planning interviews, writing & costing event plans, contracting agreements, and follow-up (see events listed below).

Freelance Business Consultant, San Diego, CA. 1989 – 1996.

Responsibilities included prospecting clients, initial interviews, writing proposals & reports, contracting agreements, research, and presentation.

## **LINDA BARNES TUCKER**

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Linda Aurora Xccessories (LAX), San Diego, CA. Owner. 1986 – 1990.

Manufacturer of leather accessories.

Direct responsibility for product development; proto-typing; purchasing; credit and collections; sales; customer relations; promotion; and bookkeeping. Supervised production, contractors, shipping, and inventory.

Arlin Inc., San Diego, CA. Vice President, Marketing & Sales. 1979 – 1986.

Responsible for product development; supervising national sales force; planning and scheduling promotional programs; coordinating design, sales, production, and shipping.

### **Research Projects & Papers**

Research Interests: Entrepreneurship, Native American Culture, Fashion Business Operations

LinC Program (Learning in Communities). Co-facilitator. 2014 – present.

Series of 4 general education courses in which select first-time college students attend in the same group (community). Success measure: reduced attrition.

“Focus on the Future.” Co-facilitator. 2013 – present.

USDA grant to develop and administer 6-quarter training program in soft skills & job readiness for first-time Hispanic students in the College of Agriculture, Cal Poly Pomona.

Principles and Practices of Creating and Sustaining Teams. Research partner. 2010.

Based on the team development theories of Schutz; Tuckman; Drexler, Sibbet, & Forrester; Jones & Bearly; and Blanchard, Carew, & Prisi-Carew.

Montvue Elementary School study of change. Research partner. 2009-2010.

An explanatory mixed-methods case study of staff concerns to document the faculty’s current story of change, motivation, and concern.

### **Professional Organizations**

Fashion Group International of Los Angeles, Inc.

Regional Co-Director 2017 – present

Treasurer, 2013 - 2016

Recording Secretary, 2010 - 2013

Student Relations Chair, 2004 – 2010.

**LINDA BARNES TUCKER**

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Fashion Group International Foundation of Los Angeles, Inc.  
President 2013 – 2016

Fashion Group International, San Diego, 1986 – 1994.  
Regional Director, 1992 -1994.

International Textiles & Apparel Association, 2006 – present.  
Curriculum Committee, 2006 – present.

**Honors**

Gamma Delta Sigma, Kellogg-Voorhis Chapter (international honor society)  
Member, 2012 - present

Teacher of the Year, Apparel Merchandising & Management Department,  
Cal Poly Pomona, Pomona, CA  
2010 - 2011  
2008 – 2009

**Credentials**

California Community College Instructor Credentials

Textiles, Textile Services and Related Technologies – Valid for Life

Marketing and Distribution – Valid for Life

Business and Industrial Management – Valid for Life





**California State Polytechnic University, Pomona  
Huntley College of Agriculture**

**B.S. PROGRAM  
IN  
APPAREL MERCHANDISING & MANAGEMENT**

**FIVE YEAR REVIEW: 2008/09 – 2013/14**

**Executive Review**

**May 2017**

## **AMM 5 YEAR EXECUTIVE REVIEW (2008/09-13/14)**

### **1.0 Introduction and Previous Self Study**

The Bachelor of Science (BS) degree in Apparel Merchandising and Management consists of two options; Fashion Retailing and Apparel Production. The Production option has two tracks namely Fashion Design Management and International Apparel Management. Over the review period the program has achieved rapid enrolment growth against a backdrop of tight economic conditions. It has achieved most of the goals set forth in the previous review period and has advanced further in program development, curriculum development, assessment, and advising by effectively using faculty, staff and other resources. With its growth record, it is imperative to recruit more tenure track faculty, add supporting staff, and attract more financial resources to secure its position as a leading program in its field within the United States.

### **2.0 Program Description, Development and Curriculum Comparison**

#### Description:

The self-study for the five-year period provides a summary strategic mapping of AMM against other selected programs in California. The AMM program continued to provide students with a thorough grounding in all aspects of the apparel business emphasizing the delivery of product and process knowledge encompassing market research, consumer behavior, product development, manufacturing, wholesale marketing, retail planning and forecasting, sourcing and buying, merchandising, supply chain and store operations management, visual merchandising, and product promotion. In addition, new emphasis on textile materials and coloration, and digital product and process technologies were added, as planned in its departmental goals. The AMM curriculum assures a broad understanding of the apparel business and its incumbent technologies and processes so that graduates will understand the perspectives, problems and focus of apparel producers, retailer's and consumer's. Besides the focus on business processes, and product and process technology, the program emphasizes, international aspects of apparel business, and personal leadership and professional development. A hands-on learning-by-doing approach is evident through the very high proportion of AMM classes that have activities or labs attached to them. The ultimate expression of this approach is the capstone sequence in both options, where students run a micro business related to their degree option. In addition, direct links between student learning and the local, national and global apparel sector is supported by involvement of AMM's industry advisory board in curriculum development, and an extensive program of industry speakers in the classroom, sites visits to companies, attendance at trade shows (as buyers for a micro-business), and the AMM London Study Abroad experience, where students split their time between studying international fashion retail markets and interning in a London fashion business.

#### Development:

##### *BS Program*

The addition of new faculty has enabled the drive to enhance the BS program, evidenced by the extensive curriculum changes over the review period. Advice from the AMM industry advisory board and guidance from the Human Resource Leadership Council of the AAFA American Apparel and Footwear Association (AAFA) supported this dynamic. Complementing this effort was continuous assessment of student attainment through evaluation of embedded assignments across the curriculum, and faculty observation, especially in the capstone sequence where students are expected to synthesize and apply their knowledge in a professional manner to operate a micro-business. The AMM faculty significantly enhanced the facilities, equipment and software technologies in the department to support curriculum development. Important strides were also made in promoting development of student competency levels in terms of soft skills; information literacy skills; and data analysis, critical thinking and problem-solving skills; through training in a broader range of software applications and media

technologies, embedding elements of the Focus on the Future curriculum; formalized research activities, and real world experiences in the capstone sequence and internship. The faculty continued this line of development with additional programmatic changes as part of semester conversion. The curriculum was bolstered with new courses on emerging digital business, process and product technologies and a new degree option in textiles.

#### *New Masters Program:*

During the review period, the faculty started developing the Masters program in International Apparel Management. The curriculum was developed with course collaboration from the colleges of Business and Hospitality Management. As part of a final revision based on feedback from the Chancellors Office, the curriculum has been converted to a semester structure. It is now anticipated that it will be implemented in Fall 2019 to avoid coincidence with semester conversion.

#### *New Certificate Courses:*

The faculty also developed certificate courses during the review period using the existing BS curriculum. These courses were to be offered through the CEU. However, sufficient demand did not materialize and the program was dropped when new curriculum development rules were retroactively applied just as the decision to convert to semesters was made on campus.

#### Curriculum Comparison:

Within California, the AMM curriculum is unique insofar as it is geared toward apparel business in a contemporary world rather than traditional fashion design or family science. None of the CSU programs analyzed in the review have the industry and technology focus that characterizes the AMM program. None of the four-year programs offer the number and variety of courses in apparel production and fashion retailing, none have the amount and range of industrial equipment, and none enjoy the extensive industry relationships that AMM possesses.

### **3.0 Program Endorsement and Assessment**

The Human Resource Leadership Council of the AAFA continued to endorse the Apparel Production Option during the review period. AMM is one of the 13 programs endorsed nationally. The faculty revised the program learning outcomes and student learning outcomes based on WSCUC guidelines and Bloom's Taxonomy. The faculty also revisited the procedures for assessment identifying and utilizing direct and indirect approaches. Methods included pre-tests for courses with pre-requisites; a survey of faculty perceptions on student learning; and annual evaluation of SLOs across the curriculum through selected projects, assignments, and embedded exam questions. Benchmarks were set to evaluate whether the program was achieving its goals. However, due to faculty workload constraints, the department has not been as effective in collecting and analyzing assessment data as it had aimed. This is an area that was identified during this review that needs improvement.

### **4.0 Program Quality**

#### Program

The instructional assessment scores for the AMM program during the review period average less than 1.93 as expected by the college target of 2.0 (with a scale of 1 being very good and 5 being very poor). The department has maintained mean average score range from 1.70-1.93. Marginally weak areas for improvement (with average score from 2-2.28) are in areas such as effectiveness of instructor's answers, completeness of instructions for assignments, labs and activities, and the clear and completeness of the grading criteria. Overall, student instructional assessment results show teaching and learning effectiveness across all quarters during the review period.

#### Faculty:

With the addition of tenure track faculty to the department, scholarship performance of the department improved during the review period. The faculty has been productive in seeking internal competitive grants such as RSCA in addition to number of external grants such as the USDA HSI grant for \$289,000. Faculty also received awards and honors from professional organizations for their scholarship activities. In addition, the faculty underwent training to introduce innovative teaching methods and to incorporate industry standard software programs into courses. Faculty promoted and mentored a number of undergraduate research projects, including two McNair scholars, leading to publications and presentations in undergraduate research conferences. These efforts were established in line with the university initiatives such as the Teacher Scholar model.

#### Service and Outreach:

All tenure track faculty participate in all department committees as well as college and university committees. External engagement was constrained by on campus commitments, the faculty participated in a number community outreach activities. These included helping to organize the annual fashion careers symposium of the California community college system, attending careers days at High schools and giving special presentations to community colleges, serving on community college advisory boards. In addition, the department was pivotal in forming a consortium of companies, originally based on our advisory board, to collaborate on integrating digital technologies to demonstrate a new model of demand manufacturing for the apparel industry named AM4U (Apparel Made for You). Maintaining close industry linkages is a key objective and differentiator for the AMM department. Our engagement with the industry needs to be strengthened.

#### Advising:

Academic advising is a one of the key responsibilities of the tenure track faculty in the AMM department. A typical advising load over the period was 70 students. Several strategies were implemented during the review period such as advising cafes, Blackboard advising resources and new advising documents to make the advising manageable, effective and productive.

The department is currently working on the significantly restructured semester BS curriculum and the proposed Masters curriculum in International Apparel Management. With semester conversion and the subsequent launch of the Masters program, student advising needs and demands on faculty will significantly increase.

#### Graduates and Alumni:

The department conducted a formal survey of seniors to identify their confidence in core learning outcomes and as a result decisions were made for curriculum revisions. The students were also engaged with their student clubs and during the review period new student club was launched as the first west coast student chapter for the American Association of Textile Chemists and Colorists (AATCC), the leading professional association in our field. AMM students also get the opportunity to participate in London study abroad program. Alumni have been supportive of the department and have attended events such as the annual banquets and open house; contact us frequently with internship and career opportunities; serve on our industry advisory board; and visit as classroom speakers including Professor for a Day. The department also receives a stream of 'casual' empirical evidence reflecting on program quality. Virtually all internship sites for AMM students provide strongly positive feedback and indicate they are keen to receive more interns from the department. A number of key industry figures, including some on the AMM advisory board continue to repeat that AMM interns and graduates are the best available. The department tracks via LinkedIn, which all students are required to establish as part of the professional preparation course AMM 341. Contact with alumni is managed though an alumni group on LinkedIn and periodic emails.

## **5.0 Resources and Suggestions for Action**

### Program development

#### *With existing resources:*

Continuous improvement with curriculum content and instructional methodologies.

#### *With new resources:*

Increase the breadth and depth of the program in emerging technologies and specialized fields with the addition of tenure track faculty.

### Student learning

#### *With existing resources:*

Strengthen our approach to assessment of learning through compliance with new WSCUC guidelines and department level initiatives related to the unique nature of the AMM program.

#### *With new resources:*

Continue and expand student tutoring for courses with high DWF rates.

### Advising

#### *With existing resources:*

Utilize new advising resources being deployed by the university and seek to improve student ownership of their affairs starting at orientation.

#### *With new resources:*

A specialist advisory and career counselor that could also contribute to assessment would be a major step in helping the department achieve educational goals for the AMM program.

### Faculty

#### *With existing resources:*

Faculty need to make the best use of existing resources on campus to support their teaching and scholarship.

#### *With new resources:*

There is a need to hire new faculty to justify enrollment growth and support further development of the curriculum.

### Support Staff

#### *With existing resources:*

More mandatory training/ refresher courses for staff on university systems and processes, especially during the summer, could support incremental improvements in operational efficiency.

#### *With new resources:*

Hiring a specialist department advisor/ career counselor would offer multiple benefits of improved advising and industry outreach, while reducing the fragmentation of tenure track faculty.

## Budget Resources

### *With existing resources:*

The department's modest operating budget is sufficient to support only basic operations: equipment maintenance, classroom and office supplies, some faculty travel, and part of one instructional student assistant. A new funding stream from competitive campus resources such as SPICE have enabled us to accelerate replacement of older equipment and introduction of new technologies to the program.

### *With new resources:*

Additional resources would permit investment in more big-ticket items such as advanced knitting technology and integrated software systems linking the consumer to manufacturing, per the AM4U business model.

## Facilities

### *With existing resources:*

The department is expanding the scheduling of classes to make greater use of Fridays and evenings to improve class scheduling and eliminate bottlenecks, especially for its laboratory classes.

### *With new resources:*

With many computer-based classes that require specialized industry software, there is a need to create a second full size computer lab in building 45. Being a mile from the central campus there is also a need to create student study and lounge facilities to reduce wasted travel time and create an improved community and learning environment.

## Equipment

### *With existing resources:*

As noted above SPICE grants offer the continued opportunity to replace older equipment and introduce new technologies to the program.

### *With new resources:*

Also noted above, new resources could support the acquisition of investment in more big ticket items such as digital knitting technology and integrated a consumer to factory integrated manufacturing, retail and distribution system.

## Library

### *With existing resources:*

AMM faculty and students need to make better use of our library resources or risk losing them due to funding constraints in the library.

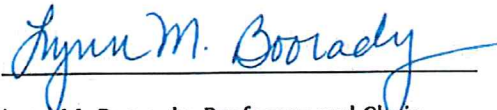
### *With new resources:*

Increased investment in digital resources will best support student needs.

B.S. Program  
In  
Apparel Merchandising & Management

External Review Report  
Submitted to the Provost and Vice President of Academic  
Affairs  
May 2017

*Submitted by:*



Lynn M. Boorady, Professor and Chair

SUNY - Buffalo State



Ting Chi, Associate Professor

Washington State University

The external review team consisting of Dr. Ting Chi from Washington State University and Dr. Lynn Boorady from the State University of New York College at Buffalo visited California State Polytechnic University, Pomona on May 31, 2017. This document is the compilation of the results of their visit.

Overall the AMM department is impressive in its state-of-the-art curriculum, dedication to their students, faculty accomplishment, and rapid growth of student enrollment. The faculty currently teach 3 courses every term, most of which are lab style or include intensive guided group projects and therefore are labor intensive. The department brings in guest lecturers from industry on a weekly basis to help students determine different career paths and start networking early. The pre-internship class also relies on guest speakers which the students appreciate.

This Program Review is written with the intent that the comments and suggestions offered in the report will be constructive and helpful to the department as it moves forward to meet its mission of educating professional to meet the challenges of today's fashion industry.

The following are the results from the external reviewers visit and reflect the thoughts of both team members.

#### 1. Program Development

The AMM department is in a state of flux currently as the entire university will be switching from a 10 week, 3 term format to the 15 week, 2 semester format in the fall of 2018. It is laudable that the faculty have undertaken the task of simplifying the curriculum and removing the electives requirement in order to not only improve graduation rates but to lesson confusion for faculty and students at registration time.

In addition, the department is adding a Textile option focusing on the science and structure of textiles as well as quality and color matching. This is a fairly unique area which would give AMM a market advantage. There is an increasing industry demand on college graduates with sophisticated textile knowledge. Two new emphases are being implemented under the Apparel Production option, which are Fashion Design Management emphasis and International Apparel Management emphasis. The department is also planning to implement a master's degree in the fall of 2019 targeted at their majors and the local industry.

Experimental courses such as social media marketing/branding/commerce and sustainability in the fashion industry should be analyzed to determine if they have a place in the current curriculum given the needs of the local industry and retail environment. As the faculty are aware, the retail environment is in a state of flux right now as consumers shop more online and brick and mortar stores are closing at a rapid



rate. Transparency in sourcing and manufacturing has become important in some sectors. The AMM advisory board would be a good resource to help make the determination on new areas of focus.

The implementation of certification for community members and students to take courses which are already in the curriculum is an excellent choice as it will increase the revenue to the university without needing additional resources. It also has the potential to bring the AMM department to the attention of future employers for the students and potential donors.

As the department stands, it has grown significantly over the past ten years and become one of the largest apparel undergraduate programs in the United States. With the popularity of the subject, competitive job placement, the growing fashion industry in Southern California, the addition of the major options and master's program, it is believed that the growth will continue. However, this growth will not be sustainable given the current faculty load. Once the faculty have determined the area of greatest need – whether it be in a new area they wish to expand or a current area that needs additional support – the need for more faculty lines will need to be addressed.

There currently is minimal collaboration between AMM and other departments on campus, most likely due to the campus focus on conversion from terms to semesters. While AMM faculty have done some outreach, the timing was not right or other departments were too busy to take on a joint project. In the future AMM hopes to work with the Technology and Operations Management area to implement RFID for their retail capstone. They are also working to include some business classes from the colleges of Business and Hospitality Management into the curriculum for the proposed master's degree to take advantage of existing classes. The possibility for a minor in conjunction with Graphic Design is being discussed. Transition to semesters has put collaborations on hold.

## 2. Student Learning and Assessment

Student assessment took place briefly in 2010 through 2012 and the results were excellent and informative. It is understandable that with the university in a state of flux converting to the semester system and the loss of the faculty member who was in charge of the assessment, this has not continued. It was also noted that the Fashion Retailing option has 35 Student Learning Outcomes and the Apparel Production option has 37 Student Learning Outcomes. It is recommended that the department focuses on a small number of high priority outcomes in broader categories in order to lessen the burden of assessment and record keeping. This will also allow them to continue their assessment efforts in on a yearly basis, however, it was stated that the university does not require assessment.

The department does take an active, indirect approach to assessment through course evaluation, internship program, their capstone courses and alumni feedback. The instructional assessment scores for the AMM courses during the review period average less than 1.93 better than the college target of 2.0 (with a scale of 1 being very good and 5 being very poor). The department has maintained mean average score range from 1.70-1.93. The students participating in the meeting with the external reviewers indicated they have received quality education in AMM and the faculty care about the learning quality of the students. The faculty, in response to an internal assessment, created a leadership course to help students reach their potential and understand the soft skills necessary to lead teams. Internal assessment where the faculty assess students based on observation would not be effective in most departments, however AMM has implemented a strong learn-by-doing curriculum with capstone courses that mimic real life situations. The faculty are therefore in a unique position to observe the learning objectives they hope to have instilled in their students actually being practiced and could immediately implement a learning moment if they observe student's struggling. Faculty meet twice a year to conduct a verbal analysis on their observations and share views of students' capabilities.

AMM have started employing student tutors to help specifically with high DWF courses to improve learning and this has been successful. This is an excellent, cost effective method of helping students achieve positive course outcomes and giving student tutors the chance to reinforce their own learning. This effort should be continued through additional funding.

### 3. Advising

Students are assigned an advisor within the AMM faculty and are expected to meet with them for registration and course selection as well as career options and advice. Each faculty member has approximately 70 advisees which minimally would mean that the advisor would have to set aside 17.5 hours or 15 minutes each. This might work if the only advising going on is to set a class schedule and meetings take place once a semester. Different students have different needs such as freshman versus transfer, academic probation students, adult and minority students to name a few. If the contacts are meant to extend beyond basic class schedules and the advising takes on a more robust role, then the caseload must be analyzed to determine if 70 advisees is more than what should be assigned to a professor teaching 3 classes a term and completing research and service requirements.

Research in academic advising shows a positive effect between advising and student retention and graduation. Klepfer and Hull (2012) noted "the strength of academic

advising is a factor in persistence. College students who reported visiting with advisers frequently had a much greater likelihood of persisting than their peers who never did” (para. 17). With the university focus on increasing student persistence and graduation rate, the strong positive effects of advising shouldn’t be overlooked.

Students mentioned that they would prefer one advisor over the course of their college career and that the advisors be well trained in the curriculum and university requirements and have the authority to help them enroll into classes (provide overrides, etc). They stated that you “need the right advisor to get out in 4 years”. Students would also like advisors to help them create an individualized 4 year plan to graduation.

#### 4. Faculty

With the addition of tenure track faculty to the department, scholarship performance of the department has improved during the review period. The faculty has been productive in obtaining internal competitive grants in addition to a few of external federal grants such as the USDA HSI grant at \$289,000. Some faculty research has been published in high ranking business journals such as Journal of Business Research, International Business Review etc. Faculty also received awards and honors from professional organizations for their scholarship activities. In addition, the faculty underwent training to introduce innovative teaching methods and to incorporate industry standard software programs into courses. Faculty promoted and mentored a number of undergraduate research projects, including two McNair scholars, leading to publications and presentations in undergraduate research conferences. These efforts were established in line with the university initiatives such as the Teacher Scholar model.

All tenure track faculty participate in all department committees as well as college and university committees. External engagement was constrained by on campus commitments. The faculty participated in a number of community outreach activities such as helping organize the annual fashion careers symposium of the California community college system, attending careers days at high schools, giving special presentations to community colleges, serving on community college advisory boards, and forming a consortium of companies. Maintaining active relationships with local industry and community is a key objective and differentiator for the AMM department.

The AMM faculty each have their own area of specialty and seem to work well together. The university is currently looking to achieve cluster hiring initiatives in which faculty are hired to work in multiple departments however it seemed unclear how these faculty would succeed in tenure expectations, particularly if the departments have varying demands.

Once the graduate level courses are up and running, the faculty feel that their time is best spent concentrating on the graduate courses as well as the 300 and 400 level courses. At their current student to faculty ratio, this may not be possible without additional lines or graduate students with the funding and ability to teach undergraduate courses.

#### 5. Support Staff

The department support staffs are made up of a full time secretary, Patty Mutz and a lab technician, Tony Espinas. For a department this size, having a dedicated full-time secretary is essential and faculty felt that while Ms. Mutz may at times be overworked, she does fulfill their needs. One lab technician will not be sufficient if future needs mean increasing the number and type of equipment.

Having a lab technician who supervises the sewing equipment, t-shirt printer, embroidery machine and other specialized machinery is important to maintain the equipment without sacrificing faculty time. Tony has been trained on the equipment and has the authority to ask for a specialist to help when needed.

#### 6. Budget Resources

Technology is changing the way we live and the fashion industry is no exception. Indeed, as clothing is universal, technology in the fashion industry touches everyone. Students need to be introduced to new technologies and understand the implications and have the ability to think creatively in order to implement technology in valuable ways. To this end, fashion programs must keep up or exceed industry expectations in order to prepare students for future careers. Technology requires not only up front investment but ongoing upgrades and maintenance. While some hardware/software can be donated and external fundraising can help bridge some gaps, it is only through sustained support and commitment from the university that can ensure students are learning the most up-to-date technology possible.

Faculty have applied for and received internal grants to help with classroom upgrades, such as an ultrasonic bonding machine, and innovative teaching techniques. These extra efforts are applauded.

#### 7. Facilities

AMM is located in building 45 and this building was originally used as Agriculture Engineering, indeed it is still a shared space building. Some of the classrooms are well laid out and conducive to students learning, for example the sewing and cutting rooms, the 3D scanning lab and one of the lecture rooms on the second floor. However one of the classrooms, 45-201 is a poorly converted storeroom (no windows) which houses some of the new technology, magazines, and books and serves as a makeshift class

room. While the importance of keeping students close to faculty and the department in order to create a sense of community cannot be understated, it is suggested that the class room be cleaned out and upgraded into a more desirable space.

It was also noted that the computer lab on the first floor is actually two physical spaces and the instructor must move across a hallway in order to teach in both spaces at one time (due to larger classes). A larger space needs to be provided in order to create a single computer classroom and, as is stated in the report, the smaller room could be used as a student lab so that work can be completed between classes.

Students appreciate the new equipment, particularly the embroidery machine and t-shirt printer so that they do not have to outsource for their designs.

## 8. Equipment

The AMM department has some new state-of-the-art equipment which the students and faculty appreciate. However, technology and the apparel industry is currently experiencing a “leap” in embracing technology and it is happening at a fast pace. The software is not inexpensive and is very robust which requires hardware with strong capabilities in order to keep up. Indeed, a computer classroom would need very powerful computing strength to hold the 3D imaging for design and for retail as well as off the shelf software such as Illustrator and Photoshop. Upgrades come out every year or two and money is not saved by skipping an upgrade as it will still need to be purchased if you want to upgrade in the future. Faculty also need to have the computers and software in their offices in order to develop and grade assignments, help students with questions, and conduct research.

The department has done well to obtain major donations of critical software systems and training. Funding needs to be put into place for maintenance and upgrades. Additional funding is needed for the department to remain cutting edge and up-to-date with the industry.

## 9. Library Resources

The library houses a number of physical books and periodicals specific to AMM as well as two online databases. With increasing number of online courses and student engagement with online content, additional online resources should be located and used. For example, Women’s Wear Daily has an online subscription service which could be available to all student through the library.

## Summary

The current initiatives the university is undertaking were heard to be time-consuming and keep faculty from doing the core expectations of their jobs. One faculty stated that “it is tough to keep up – [the initiatives] soak up time and energy”.

The students shared their insights with the external reviewers and they felt that their faculty, while strained for time, remained passionate about teaching and were willing to help students achieve quality learning experience. Students requested access to an alumni database which would be in conjunction with a job database to help them network and find internships/jobs. The students appreciate the pre-internship class, particularly the tips on business communications. They feel as though they “get a bit of everything here – retail, production and design” and that this rounded curriculum will help them in the future. They would appreciate a few more individual projects with an eye on building their portfolios and suggested that faculty discuss building a cohesive portfolio throughout their college years to ensure interview readiness. Students feel that they have good connections to their professors and want their department to continue its success and do even better. Lastly, one of the students summed up our discussion by saying “As thin as faculty are spread out, they are passionate about the students”.

The department is a thriving unit in many ways with strong student numbers, engaged faculty, and visionary leadership. Based on the Review Team’s evaluation, the following are recommended to strengthen the department and provide opportunities for growth:

- Hire at least one new tenure-track faculty member to help balance the teaching and advisement loads of current faculty and reduce dependence on adjunct faculty.
- Continue to strengthen and promote their ties to industry and the benefits this brings to the students.
- Strengthen alumni relationships and create/update a database on alumni to help build the department and inform current students of internships and career opportunities.
- Continue with the department’s strong learn-by-doing pedagogy, particularly in the senior capstones. These experiences truly set the students apart.

Klepfer, K. & Hull, J. (2012) High School rigor and good advice: Setting up students to succeed (at a glance). Retrieved from [http://www.centerforpubliceducation.org/Main-Menu/Staffingstudents/High-school-rigor-and-good-advice-Setting-up-students-to-succeed on June 2, 2017](http://www.centerforpubliceducation.org/Main-Menu/Staffingstudents/High-school-rigor-and-good-advice-Setting-up-students-to-succeed-on-June-2, 2017)



CAL POLY POMONA

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

Memorandum

Date: September 12, 2017

To: Dr. Larisa Preiser-Houy, Interim AVP for Academic Programs and Dr. Seema Shah-Fairbank, Director of Assessment and Program Review, via Dr. Lisa Kessler, Interim Dean. College of Agriculture.

From: Dr. Peter Kilduff, Former Chair, Dept. of AMM and Interim Associate Dean, College Ag  
Dr. Muditha Senanayake, Interim Chair, Department of AMM  
Dr. Chitra Dabas, Associate Professor  
Dr. Jianging Che, Assistant professor  
Dr. Angella Kim, Assistant Professor  
Dr. Saeme Lyu, Assistant Professor

*Handwritten signatures and dates:*  
9/12/17  
9/12/17  
9/12/17  
9/12/2017

Subject: Apparel Merchandising and Management Department Response to External Reviewers Report on 2008/9-13/14 Academic Program Review.

The external review team consisting of Dr. Ting Chi from Washington State University and Dr. Lynn Boorady from the State University of New York College at Buffalo visited the AMM Department on May 31, 2017 in association with the 2008/9-13/14 Academic Program Review. AMM faculty members who participated in this review process carefully read and analyzed the external review report. Below is the collective response from the AMM faculty.

The reviewers noted that 'the AMM department is impressive in its state-of-the-art curriculum, dedication to their students, faculty accomplishment, and rapid growth of student enrollment'. This is a strong commendation of the program and faculty.

**Program development:**

The reviewers considered that simplifying the semester curriculum to improve graduation by reducing confusion was a good strategy. They also noted that the new Textiles Option was one that should meet an important industry need. These reflect the AMM faculty's commitment to continuous improvement and student success.

The reviewers incorrectly stated that the Production Option would have two new emphases, but the new emphases are being implemented under the Fashion Retailing Option (Fashion Retail Management and Fashion Retail Merchandising).

The report states that due to industry changes the department needs to work with its advisory board to identify new areas of focus. In fact, the AMM faculty and the industry advisory board maintain a continuous dialog on this. The faculty also receive feedback directly from employers who are not on the advisory board regarding the careers and skills sets that are in demand. The changes in the retail curriculum under semester conversion, including its division into two emphasis areas reflects, in significant part, these very changes in the industry.

We agree with the reviewers that as one of the largest programs of its kind in the US (and one of the highest ranked), it needs to be supported by more tenure track faculty lines.

The reviewers commented that there was minimal apparent collaboration between AMM and other departments. This is true but multiple efforts have been made in the past to develop collaborations with other colleges on the use of RFID in retailing, on wearable technology applications, and fashion technical design. Constraints on faculty time created by economic circumstances, and new CSU initiatives have been factors in frustrating these.

### **Student Learning and Assessment:**

The reviewers noted that the faculty should rationalize student learning outcomes to improve assessment. We agree. The high number is a reflection of the criteria required for program endorsement by the American Apparel & Footwear Association and the department's demonstration to them that their requirements are built into our learning outcomes. We are working on reducing these while maintaining transparency.

We are not sure what the statement about the university not requiring assessment means. The Department is committed to and worked on previous assessment initiatives from the university and the college and is currently engaged in the CALM process (College of Ag Learning Measurement). Further, two faculty members attended the 2017 Summer Assessment Institute and are involved in developing institutional level rubrics in problem solving and critical thinking, which is evidence of the department's commitment on university level assessment efforts.

Regarding the capstone sequence as an assessment tool, we agree with the reviewers. It is unique, placing students in roles where they have to synthesize and apply their knowledge to manage a real micro-business. It provides a truly unique perspective for faculty to evaluate whether students are prepared for their first job after graduation. However, we understand the importance of better capturing and documenting these outcomes.

### **Advising:**

The reviewers noted the students indicated that AMM faculty are strongly committed to advising. Reviewers commented on the challenges that tenure track faculty have as advisors, with approximately 70 advisees each. While it is challenging, the department also has committed to continuous advising, including mandatory advising. We understand its effect on developing better graduates and improving graduation rates, in alignment with the university graduation initiative. Advising faculty and the college staff advisor maintain a dialog concerning more effective approaches to advising.

### **Faculty:**

The reviewers note that AMM faculty have been productive in scholarship, advancing instruction and university service. The reviewers comment that while maintaining active relationships with local industry and community is a key objective and differentiator for the



AMM department, external engagement was constrained by on campus commitments. Almost all AMM faculty members have extensive industry experience, but limited time beyond their instructional and service duties adversely affect opportunity for industry engagement and thus opportunity for student-industry engagement. Nevertheless, the commitment to extend and deepen linkages with the industry and community is reflected in a new funded initiative being launched by the department in 2017-18.

**Staff:**

The reviewers commented that one lab technician will not be sufficient if future needs mean increasing the number and type of equipment. The current technician has been with AMM for a long time and is very knowledgeable and supportive given the growth of the program. He is the only technician taking care of multiple labs with a growing array of technologies and equipment, ranging from textile testing, virtual reality systems, apparel production, digital printing, embroidery and ultrasonic bonding. As we march towards adding more novel technologies, as the reviewers explain, more technical support will be needed.

**Budget:**

The reviewers noted that the need to keep pace with technological change in the industry will entail significant investment needs. The reviewers emphasized that it is only the sustained support and commitment from the university that will ensure students are learning the most up-to-date technology available. We agree but also note that the department is also active in seeking donations in support of this goal.

**Facilities:**

The reviewers indicated that some department classrooms are inadequate and need to be significantly improved, notably rooms 45-125 and 45-126 (where two adjacent computer labs are used to teach one class of 24-30 students), and room 201, which is an old storeroom. We agree and have been seeking university funds to support these changes.

**Library resources:**

The reviewers noted the need to build online resources. Budget constraints in the library have seen a number of expensive online subscriptions cancelled. However, the point about Women's Wear Daily, the primary news source for the US apparel and fashion retail industries is well taken. A request will be made. We understood articles from this can be extracted via a database search. However, full subscription would provide students much better access.

**Summary:**


Many of the reviewers' comments reflect the active engagement of AMM faculty in developing an appropriate curriculum, innovating in the classroom with high impact practices, supporting students through advising, engaging with industry, and maintaining strong scholarship productivity.

With regard to the comment on student portfolios, an initiative was introduced by the department in 2015 that all majors should develop an online e-portfolio and that all courses should require a reflective learning piece to be incorporated into the portfolio. Also, with regard to the comment on opportunity for individual projects, they are offered to students even though the opportunity for individualized experiences is limited, given faculty workloads.

Referring to the reviewer comments on an Alumni Database, all AMM majors are required to join Linked-In as part of their pre-internship experience and about 75% of alumni remain active on Linked-In. The department uses Linked-In to track alumni and has an alumni group that has about 35% of our graduates in it. We use Linked-In as the primary mechanism to communicate with alumni.

With regard to comments on the number of tenure track faculty, it was surprising that in their report the reviewers suggest only one faculty line, as during the meeting they recommended that we need at least three new faculty.

Office of the Dean  
Don B. Huntley College of Agriculture

Date: September 14, 2017  
To: Dr. Larisa Preiser-Houy  
Interim Associate VP for Academic Programs  
From: Dr. Lisa Kessler   
Interim Dean  
Re: Response to Apparel Merchandising & Management (AMM) External Review

The external review team consisting of Dr. Ting Chi from Washington State University and Dr. Lynn Boorady from the State University of New York College at Buffalo visited California State Polytechnic University, Pomona on May 31, 2017. The College received the reviewers' report on June 14, 2017. Their report provides a thorough review of the program's status, operations and ambitions. Overall the review was very positive and indicated that the AMM department is impressive in its state-of-the-art curriculum, dedication to its students, faculty accomplishment, and rapid growth of student enrollment.

General Comments: The reviewers commented that the department is a thriving unit with strong student numbers, engaged faculty, and visionary leadership. They indicated that current initiatives the university is undertaking were heard to be time-consuming and keep faculty from doing the core expectations of their jobs. The students shared their insights with the external reviewers and students expressed that their faculty, while strained for time, remained passionate about teaching and were willing to help students achieve a high quality learning experience. The reviewers complimented the faculty on the fact that during the semester conversion process they have simplified the curriculum and removed elective requirements which should reduce confusion for both students and faculty during registration time and ultimately lead to an improvement in graduation rates.

Suggestions for Improvement: The faculty provided a memo on June 12, 2017 stating that they concurred with suggestions regarding program staffing, student advising, curriculum, assessment, resources, budgeting and facilities.

Suggestion 1: Faculty should analyze whether experimental courses such as social media marketing/branding/commerce and sustainability in the fashion industry have a place in the current curriculum given the needs of the local industry and retail environment. The Dean's office (DO) feel the faculty currently do this and will continue to analyze the appropriateness of courses as they interact frequently with their robust industry advisory board on curricular issues. The Department commented that they "maintain a continuous dialog" with their advisory board on programming and curricular items.

Suggestion 2: Implement certificates for community members and students to take courses which are already in the curriculum (thru the College of the Extended University (CEU) which would increase the revenue to the university. Although the Dept. did not comment on this in their response, the Dept. has been working with CEU on a self-supported master's program and summer camps and are encouraged to create any other appropriate certificates that the public may have an interest in.

Suggestion 3: It was recommended that the department focus on a small number of high priority learning outcomes in broader categories in order to lessen the burden of assessment and record keeping and allow them to continue their assessment efforts on a yearly basis. However, it was stated incorrectly that the university does not require assessment. The Department noted in their response that they were uncertain as to why the reviewers incorrectly thought the University did not require assessment. The department does participate in ongoing assessment both through the University efforts and the College's CALM committee (College of Agriculture's Learning Measurement). Two AMM faculty members also participated in the 2017 summer assessment institute and are involved in developing rubrics for assessing problem solving and critical thinking skills. The DO feel the AMM department is committed to and providing appropriate assessment and encourages them to continue along current efforts. Regarding the high number of student learning outcomes, that number is required for program endorsement by the American Apparel and Footwear Association.

Suggestion 4: The reviewers suggest that the department analyze whether the current caseload of 70 student advisees per faculty member is too high. They noted the importance of advising and its connection to retention and graduation. The AMM Department noted in its response that they are strongly committed to advising and will continue a dialog with the College's professional advisor to seek ways to conduct effective advising in a more efficient way. The DO agrees that the AMM Department is committed to advising and doing an excellent job with it and that advising is crucial to student success. The DO would like to have more professional advisors (as it currently has 1.25 for 2000 students) as that would reduce the faculty advising load.

Suggestion 5: A second suggestion regarding advising is that students would prefer one advisor over the course of their college career and that the advisor be well trained in the curriculum and university requirement. The AMM department and the College professional advising staff can work together regarding advising assignments for students and professional development regarding advising so that all faculty are very knowledgeable about advising.

Suggestion 6: The reviewers noted that one instructional support technician will be insufficient should the department student numbers continue to grow. If student numbers warrant, the DO will explore a solution to this (perhaps requesting an additional joint technician between large and growing departments) or hiring a graduate assistant on a part-time basis to assist with these important learning needs for equipment and technology.

Suggestion 7: The reviewers suggested upgrading classrooms in particular, 45-201. In its response, the Department agreed with this suggestion and will seek university funds to enact this suggestion. The DO supports the AMM department's intention to pursue funding to upgrade these rooms.

Suggestion 8: The reviewers suggest that the department seek funding for maintaining and upgrading critical software systems. The AMM department did state in their response, that they will pursue additional funding through internal university funding sources and external grants and donations. The DO concurs that seeking funding both internal and external to maintain state of the art technology is a good idea.

Suggestion 9: The reviewers suggested for the Department to obtain an online subscription to Women's Wear Daily. The Department stated that they will make that request to the Library. The DO supports that action.

Suggestion 10: The reviewers support the students' suggestion that faculty work more with them on creating portfolios. The Department responded that an e-portfolio was introduced in 2015 for all majors and that they will continue to incorporate this into the curriculum and look for opportunities for the faculty to work with students individually as much as possible given their work load. The DO support the Departments' approach to this.

Suggestion 11: The reviewers suggest hiring at least one additional tenure-track faculty. The Department felt the reviewers had indicated during their visit that several new faculty lines were needed. The DO supports the suggestion of at least one additional faculty line and should the student numbers increase, additional faculty lines should be considered accordingly.

Suggestion 12: Continue to strengthen and promote ties with industry. The Department did not comment specifically on this suggestion. The DO encourages the Department to continue its current work with their advisory board and look for new ways to expand its ties with industry.

Suggestion 13: Strengthen alumni relationships and create a database on alumni, the Department noted that it now required its students to join linked in which will serve as a mechanism to communicate with alumni. The DO asks that the department consider assigning alumni relations to a particular individual staff or faculty member and the DO will explore the idea of providing a little release time to faculty to pursue this

Conclusion: Overall, the review was very positive. The reviewers commented that the faculty have been productive in obtaining competitive grants and have also published in high ranking journals such as the Journal of Business Research and the International Business Review. They also lauded the department for its effective use of student tutors in reducing high DWF course. They felt this approach was a cost-effective effort to encourage positive course outcomes and student learning. I congratulate the AMM department on its excellent external review, the quality of the teaching and research, the attention to student success and the ability to do outstanding work given numerous competing and heavy work obligations.