Proposal for Ph.D. Degree in Apparel Design in the Field of Textiles at Cornell University

Abstract

The proposed Ph.D in Apparel Design will extend and complement the BS, MS, and MA qualifications that are currently offered in the HEGIS Discipline number 0201, Textiles. The Ph.D program will establish the first Ph.D program within the United States dedicated to the study of Apparel Design and will address the need in academia, industry, and research for a terminal degree in this subject area.

Apparel Design is a broad subject that is underpinned by a theoretical knowledge base in the areas of design, dress and human behavior, and apparel technology. Apparel Design examines and offers solutions to issues that affect the creation, distribution, and use of apparel by means of technological innovation, cultural transmission, innovation by designers and consumers, functional attributes, human factors, and geopolitical change. The multidisciplinary composition of Apparel Design could include minor concentrations in visual studies, media studies, production and distribution systems, aesthetics, human factors and ergonomics, history, literature, anthropology, and social psychology, among others.

Existing faculty, staff, and funding support of the Department of Textiles and Apparel in the New York State College of Human Ecology and other departments within Cornell University will provide the foundation for offering this degree. The department has a strength and depth in faculty knowledge and research specializations which include the creative design of apparel, and the science of textiles through the structure, fabrication, and color to offer graduate study in both functional and creative design.

The faculty recognizes distinctions between masters and Ph.D level and emphasizes program aims and objectives accordingly.
Proposal for Ph.D. Degree in Apparel Design in the Field of Textiles at Cornell University
January 2004

I. Goals

We propose the addition of a Ph.D. degree in Apparel Design to the Textiles Field. This will result in two subject areas, that of Fiber Science and Apparel Design, offered under one field, Textiles. The Ph.D. in Apparel Design would be an addition to the current graduate degrees: the PhD and MS in Fiber Sciences and MA in Apparel Design, in the HEGIS Discipline Number 0201, Textiles.

The proposed PhD degree will extend the offerings in the Textiles field, complementing the current teaching, research, and outreach programs at Cornell with expertise in textiles and apparel. The Ph.D. degree in Apparel Design uses existing faculty in the field of Textiles and complements and draws upon the Fiber Science and Apparel Design subject areas. The uniqueness of this program from others offered is its emphasis on both science and design.

Apparel Design is a specialization that integrates principles in the application of design, technology, physical sciences, the humanities, and social sciences to meet basic human needs for clothing. Apparel Design is an applied science with a theoretical base of knowledge in three areas:
A) Apparel design; the functional and fashion design processes,
B) Dress and human behavior; the meaning of dress, aesthetics, and fashion, and
C) Apparel technology; the technology, materials, and product interface with the consumer.

The proposal combines the strengths of the faculty in the creative design of apparel and the science of textiles through structure, fabrication, and color to offer graduate study in both functional and fashion apparel design. The Apparel Design concentration will emphasize product design, the science of the product, and the product-user interface. We have made distinctions between the mastery levels of knowledge and research at masters and Ph.D. as follows:

- Creative process
- Focus on theory and its applications
- Depth and breadth of knowledge of the literature
- Extent and originality of contribution to the field
- Development of an unique expertise defined by dissertation research
- Breadth and independence of data collection and analysis

II. Planning Implications: Placement of and Demand for Apparel Design Ph.D. Graduates

Graduates of the program will meet the need for professors to teach and conduct research at colleges and universities as well as research and development for industry and government, such as [TC]^2, Clemson Apparel Research Center, TAIX, NASA, and Natick Army Labs.

A count of apparel programs in the U.S. reveals 162 four year colleges and universities that offer some apparel coursework (graduate or undergraduate). There are 24 Ph.D. programs (see Appendix A) in the U.S. that offer courses in apparel design and include some faculty with apparel design specializations, but there are no PhD degrees specifically named Apparel Design (although there are Universities that offer an apparel design concentration under another named degree). Cornell’s Textiles and Apparel Department has a focused apparel design program in which five faculty members have apparel design backgrounds, four of whom are graduate faculty members (see Appendix B). Cornell is unique in having an entire curriculum oriented toward the apparel designer that concentrates on both fashion and function. This strong design program is also unique in that it is linked within the department to an internationally respected fiber science program that will offer graduate students the opportunity to merge classic apparel design methods with cutting edge technological research in textile materials. In addition, proximity and outreach have created strong links with the apparel industry in New York, the acknowledged center of the fashion industry. These factors create an ideal environment to create the first focused PhD program in Apparel Design in the country.

Currently there is a national need in the field for apparel design Ph.D. graduates. All departments teaching apparel need Ph.D. level apparel designers on their faculties. Based on membership in the International Textile and Apparel Association (ITAA), a professional organization with majority membership, there are 175 U.S. two- and four-year institutions offering apparel courses that have faculty members in ITAA and approximately 300 faculty memberships in
ITAA from U.S. institutions. In addition, while there is evidence that older faculty are delaying retirement, it is undeniable that in the next decade substantial numbers of retirements will occur and that this pattern will continue for some time. A 1999 briefing paper published by the Association of American Colleges and Universities reported that 32% of all full-time faculty were 55 or older, an increase from the 1989 level of 24%. Also the number of faculty below the age of 45 had dropped from the 1989 level of 41% to 34%. Based on an analysis of job announcements of faculty positions in apparel, there were 10-12 apparel design positions advertised each year in the last 10 years. The current lack of focused apparel design Ph.D. programs certainly makes it difficult to find qualified candidates for the vacancies that occur.

It should be emphasized that in spite of the well publicized movement of textile and apparel manufacturing offshore, this does not mean that the need for trained textile and apparel professionals is disappearing; the needs are simply changing. Current national and international concerns regarding innovative product development, sustainable design to prevent environmental degradation, industry technological innovations, OSHA workplace issues, homeland security, and international military activity are likely to increase the demand for highly qualified apparel design researchers able to engineer the sophisticated apparel design needed in today's world. New materials, technologies and market conditions require a generation of designers capable of conducting research and development for these new circumstances.

Cornell's Department of Textiles and Apparel is uniquely positioned to meet this need, and has already contributed trained designers at the undergraduate and masters levels (see Appendix C for a list of MA Theses completed) that have pursued careers in this direction. Ph.D. level training will better position the researcher in this increasingly sophisticated field.

III. Curriculum

Coursework:

Requirements for Ph.D. in Apparel Design. The program of study for the Ph.D. degree will consist of a major in apparel design plus two minor subjects. Some examples of suitable minor subjects are design and environmental analysis and human factors, art history, communication, anthropology, history, and industrial and labor relations.

Graduate students in the Ph.D. program are expected to meet the general requirements set forth by the Cornell Graduate School in the Code of Legislation of the Graduate Faculty with respect to residence, selection of Special Committee, examinations, and thesis. All students will be expected to either have a Master's degree upon admission or to earn a MA degree during graduate study at Cornell University.

Residence. Study in residence at Cornell University is essential to attain the breadth of knowledge for scholarly work. Residency provides persistent and continuing interactions with others engaged in similar research and scholarly pursuits as well as providing for attendance at lectures, seminars, and other academic meetings and usage of libraries, laboratories, computers, and other physical facilities.

Special Committee. A student entering the Ph.D. program will select a Special Committee made up of a chairman representing the apparel design major and two minor committee members. A fourth member will be appointed by the Director of Graduate Studies in the Field of Textiles. The student and his/her Special Committee will determine the precise program of study to meet the needs of the student.

Preparation upon entry.

Students will be expected to enter the program with an adequate level of apparel and textiles content knowledge. Outstanding candidates entering from another field may be required to make up a limited amount of apparel and textiles background work after admission to the program in addition to the course and research expectations of the PhD degree. This basic knowledge level is represented in the content of the following Department of Textiles and Apparel undergraduate courses offered in three broad areas: Textiles, Apparel Design, and Apparel Technology:

- Textiles
  - TXA 237 Structural Fabric Design
  - TXA 335 Fiber Science
  - TXA 370 Principles of Color and Design in Textiles

- Apparel Design
  - TXA 125 Art, Design and Visual Thinking
  - TXA 264 Draping
  - TXA 265 Apparel Pattern Making
  - TXA 369 Style, Fashion, and the Apparel Industry

- Apparel Technology
  - TXA 114 Introduction to Computer-Aided Design
  - TXA 266 Apparel Design: Product Development

Appendix D lists references that provide a foundation from the literature for the field of Apparel Design. Students will also be expected to be familiar with this body of work.
Dissertation. Original research by the candidate is an essential requirement for the Ph.D. degree. The research must provide a substantive demonstration of the candidate's ability to perform as an independent investigator. The topic of research may be in any apparel design subject included in the areas defined by this proposal. The preparation and final defense of the thesis will be in accordance with the regulations established by the Graduate School. The Special Committee will provide academic guidance and will make final approval of the thesis and thesis defense.

Courses. Recommended coursework for the Apparel Design subject area will be drawn from the following TXA course offerings. In addition, all students must complete three courses in statistics (e.g. ILR 510 and 511) and/or research methods (e.g. DEA 656 Research Methods in Human-Environment Relations or ANTH 652 Evidence: Ethnography and Historical Method).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>TXA 431</td>
<td>Apparel Production and Management</td>
</tr>
<tr>
<td>TXA 432</td>
<td>Product Quality Assessment</td>
</tr>
<tr>
<td>TXA 466</td>
<td>Textiles, Apparel and Innovation</td>
</tr>
<tr>
<td>TXA 470</td>
<td>Fashion Presentation: Portfolio Development</td>
</tr>
<tr>
<td>TXA 637</td>
<td>Research Seminar in Apparel Design</td>
</tr>
<tr>
<td>TXA 664</td>
<td>Human Factors: Anthropometrics and Apparel</td>
</tr>
<tr>
<td>TXA 670</td>
<td>Fashion Theory and Practice</td>
</tr>
<tr>
<td>TXA 999</td>
<td>Doctoral Thesis and Research</td>
</tr>
</tbody>
</table>

Minor Subject Areas. Other courses available for this program to support the two required minor subject areas are currently offered by many different departments across the university. With the guidance of the Special Committee, the student will select courses for the major and minor subjects. Possible sets of minor courses are listed below:

**Design and Environmental Analysis**
- DEA 645 Dancing Mind/Thinking Heart: Creative Problem-Solving Theory
- DEA 656 Human Factors: Ergonomics-Anthropometrics
- DEA 652 Human Factors: The Ambient Environment
- DEA 660 The Environment and Social Behavior
- DEA 668 Design Theory Seminar

**Art History**
- ART H 570 Theory Seminar II: Representation
- ART H 571 Theory Seminar III: Mimesis
- ART H 407 The Museum and the Object
- ART H 490 Art and Collecting: East and West

**Communication**
- COMM 510 Organizational Communication: Theory and Practice
- COMM 540 Impact of Information Technology
- COMM 626 Impact of Communication Technologies
- COMM 640 Computer Mediated Communication: Theory and Research

**Anthropology**
- ANTH 601 Proseminar: Social Organization
- ANTH 613 Cultural Production of the Person
- ANTH 621 Sex and Gender in Cross-Cultural Perspective
- ANTH 679 Technocracy: Anthropological Approaches

**History**
- HIST 709 Introduction to the Graduate Study of History
- HIST 617/618/621 Seminar in American Cultural History
- HIST 678 Seminar in Modern European Social History
- HIST 711 Introduction to Science and Technology Studies

**Feminist, Gender & Sexuality Studies**
- WOMNS 613 The Political Economy of Gender and Work
- WOMNS 626 Graduate Seminar in the History of American Women[ HIST 626]
- WOMNS 671 Feminist Methods [R SOC 671]
WOMNS 691  Femininity, Ethics and Aesthetics

**Industrial And Labor Relations**
- ILRIC 635  Labor Markets and Income Distribution in Developing Countries
- ILRIC 636  Comparative History Women and Work
- ILRIC 638  Labor, Free Trade & Economic Integration in the Americas
- ILROB 520  Organizational Behavior and Analysis
- ILROB 622  Sociology of Markets
- ILROB 626  Organization and Social Inequality

**New Courses.** No new courses are necessary for this new degree (though new courses will be developed as appropriate in the future within the resources available). The TXA Department has just completed an evaluation and revision of its current apparel design offerings to reorganize and accommodate the higher degree program as well as the BS and MA degrees. The new degree will complement the Ph.D. in fiber science and draw on its faculty resources and courses to strengthen the functional design aspects of the program. The TXA 999 course number will be used for Doctoral Thesis and Research Seminars.

**Seminar Programs.** An active, weekly textile field seminar program provides a forum for discussion of a broad range of problem areas and basic theory and for exposure to a variety of current topics in textiles, both fiber science and apparel design (see Appendix E for sample seminars from the past on apparel design topics). This seminar series serves as an important component of graduate training. Students, faculty, and visiting speakers actively participate in the preparations, presentations, and discussions. About one-half of the seminars over an academic year are given by invited speakers from outside of the University, while the other half are offered by faculty and graduate student speakers across Cornell.

A weekly, one-credit seminar for Apparel Design students is offered under the TXA 637 number. It provides a forum for students to present preliminary research ideas and practice delivery as well as to discuss opportunities and challenges that are shared by apparel design graduate students and strategies to address these.

**IV. Students**

**Requirements for Admission**

**Admission Standards.** A student who wishes to enroll in the Ph.D. program in apparel design must apply to and be accepted by the field of Textiles. Prospective graduate students will apply for admission to the Field of Textiles with a subject area in Apparel Design. All applicants must present scores from the Graduate Record Examinations, including the writing evaluation now integrated in the GRE. Students holding a master's degree may use previous examination scores to satisfy this requirement. Students whose native language is not English must present scores for the TOEFL examination, if they have not studied at least two years or received a degree in a country where English is the native language. Where relevant, students will also be asked to submit a portfolio. Applications will be reviewed by the members of the graduate field. Only students with outstanding records will be admitted to the program.

For admission to the graduate program the student shall:

1. hold a baccalaureate degree or its equivalent from a university of recognized standing;
2. have preparation in apparel design, or in related areas.
3. have command of the English language, which means a TOEFL score of at least 600 for applicants that are required to submit this score
4. provide evidence of potential for advanced study, which in general means a combined score of approximately 1200 or above in the verbal and quantitative aptitude tests of the GRE, grade point averages of 3.0 (B) or above, and rank within the top third of the baccalaureate class.

**Academic Preparation**

Outstanding students with a B.S. or B. A. degree in textiles and apparel or related areas such as industrial design, interior design or architecture, engineering, computer science, art history, anthropology, or history may be admitted into an M.A./Ph.D. program depending on the relevance of their background to the research specialty they will pursue. Since apparel design is a highly interdisciplinary field, decisions will be made on a case by case basis.

**Requirements for Graduation**

**Residence Credit:** All candidates must remain in residence at Cornell University for a minimum of six "residence units" of post baccalaureate study. One semester of full time study at an acceptable level of academic performance earns one residence unit. No more than seven years may intervene between the first registration and the granting
of a Ph.D. degree, although it is possible to petition the General Committee of the Cornell Graduate School for an extension.

Examinations: Two examinations are required for a Ph.D. degree.

1. A Examination for Admission to Ph.D. Candidacy. The A exam is a comprehensive written and oral examination that will certify that the student is eligible to present a dissertation to the Graduate Faculty and will cover subject matter content in apparel design as defined on page 4. It may be taken after successful completion of one year of study and must be taken before the beginning of the fourth year or before beginning the seventh unit of residence. Two units of residence credit must be accumulated after passing the Admission to Candidacy Examination before the Final Examination is taken. The determination of pass or fail rests exclusively with the Special Committee, and all members of the Committee must approve. If a student fails the examination, reexamination is allowed, upon approval by the Special Committee, three months or more after the failure.

2. B Examination for Ph.D. Candidate. The B exam is an oral examination that covers the subject of the dissertation. This final examination must be passed within four years after completing the required residence units, or seven years after the first registration in the Graduate School, whichever is sooner.

Graduate faculty members other than the Special Committee members may attend either of these examinations.

Dissertation. A research topic will be chosen that represents a basic problem in apparel design and requires application of fundamental principles in its solution. The thesis will be an accurate, complete presentation reporting the research. The thesis must constitute a creative and original contribution to knowledge in apparel design that is worthy of publication in the appropriate literature.

IV. Enrollment. (Enrollment in the MA degree program in Apparel Design for the past ten years is indicated below.) Enrollment has been slowly increased to five students as funding support has been acquired through external sources. Applications, admissions, and graduation rates for MA degree program in Apparel Design for the past ten years are indicated below. We expect our application rate to increase as both MA and Ph.D. degrees are offered. It is quite typical in our field for students to complete both degrees at the same institution. We have many requests for a Ph.D. degree in Apparel Design each year.

Enrollment in the Ph.D., M.A., and M.S., Programs in the Textiles Field

<table>
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<th>Year</th>
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<td>11 (2)</td>
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<tr>
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<tr>
<td>1999</td>
<td>26 (2)</td>
<td>11 (2)</td>
<td>5 (2)</td>
</tr>
<tr>
<td>2000</td>
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<td>13 (4)</td>
<td>6 (3)</td>
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<tr>
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<tr>
<td>2002</td>
<td>45 (15)</td>
<td>21 (8)</td>
<td>6 (4)</td>
</tr>
<tr>
<td>2003</td>
<td>33 (8)</td>
<td>6 (2)</td>
<td>6 (2)</td>
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*(numbers in parentheses are M.A. students in Apparel Design)
## Enrollment in the Ph.D. Program in the Textile Field

<table>
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<th>Total</th>
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## Enrollment in M.A. and M.S. Programs in the Textiles field

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<td>2002</td>
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*(M.A. in Apparel Design)
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*(M.A. in Apparel Design)*

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Graduate School | 4,700 | 4,700 | 4,700 | 4,700 | 4,700 | 4,700 | 4,700 |
Cornell University | 20,225 | 20,225 | 20,225 | 20,225 | 20,225 | 20,225 | 20,225 |

below: (each column represents cumulative enrollment minus students who graduate)

**Estimates of enrollment in current MA and proposed Ph.D in Apparel Design**

These numbers are based on the following assumptions:
- the number of master’s students will remain constant, after the first year
- the addition of new Ph.D. students will initially come from existing MA students. It is predicted that MA students will remain constant at four while Ph.D. students will increase every two years until a total of eight MA and Ph.D. students are enrolled each year
- Cornell University anticipates maintaining a steady state enrollment around 20,225 and the Graduate School enrollment is projected to be stable with a total enrollment of about 4700.

The increase of 2 to 3 students over the next decade represents no significant change in enrollment for the Department of Textiles and Apparel or the Graduate School.

**V. Faculty**

Faculty Resources. The current faculty members are well recognized in their areas of specialization as illustrated by their publications and presentations. The graduate faculty in the Field of Textiles are listed below. The Apparel Design faculty within the Textiles Field have provided their curriculum vitae in Appendix B. (See Appendix B-Faculty Curriculum Vitae)
The current graduate faculty in textiles field (2004) is as follows:

<table>
<thead>
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<th>Rank</th>
<th>Number</th>
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</tr>
<tr>
<td>Associate Professor</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11</td>
</tr>
</tbody>
</table>

No additional faculty positions are required to initiate this degree program.

### VI. Facilities, Costume and Textiles Collection, and Libraries

**Facilities**
The department of Textiles and Apparel has well-equipped apparel labs which are used for graduate and undergraduate teaching and research. Many levels of graphic design and drafting software are available in the College’s CAD classrooms and labs as well as in other computer facilities within the department and across campus. The advanced apparel CAD lab within the three apparel design studios contains Industry-standard computer stations (Lectra, Adobe Photoshop and Illustrator, U4ia) for pattern making, grading, marker making, custom fitting of patterns, product development, and illustration. Students also have access to a 3-D body scanner, and industrial production equipment for construction of both woven and knit garments.

Graduate students have access to computers in a graduate student cluster, in a shared design graduate student office, and in several labs and research facilities. An environmentally controlled laboratory houses sophisticated textile testing equipment. The super computer in Cornell’s renowned Theory Center and other specialized equipment on campus is available to graduate students for research use.

Other facilities available in the College of Human Ecology include the Human Factors lab in the Department of Design and Environmental Analysis. Examples of the tools in this lab that would be useful to apparel research include a video motion analysis system and a thermographic camera.

Students also have access to the Metabolic Lab in the Division of Nutrition. Students can use this lab to measure physiological changes both in a resting state and while exercising.

**Cornell Costume and Textiles Collection**
The Cornell Costume and Textile Collection is housed in the Department of Textiles and Apparel and is used regularly for teaching and research. The 9,000+ items include:
- Fashion collection including material from 18th century to the present
- Textile holdings including Coptic textiles, European examples from the Renaissance and after
- Lace collection supported by a major documentary archive in Mann Library on lace
- Ethnographic collection including rare examples from all over the world.

The catalogue of the Collection is online and searchable from any networked computer via the Internet. It can be reached via the Textiles and Apparel home page at http://www.human.cornell.edu/txa

There are other artifact collections on campus such as the Anthropology Department Collection which contains many rare items, including a number of Pre Columbian textiles.

The Johnson Museum of Fine Art houses not only art works but also some exceptional examples of ethnographic and historic textiles and costume. The Cornell Costume Collection and the Johnson have collaborated in planning and installing joint costume and textile exhibitions.

**Libraries**
Cornell University Library is one of the largest academic research libraries in the U.S.
- 19 separate libraries
- Over 6 million printed volumes
- More than 60,000 journals
- Over 1,000 networked resources

Major libraries in the system include:
- Albert R. Mann Library serving the land grant units
- Olin Library, the graduate research library
- Kroch Library house the Far Eastern Collections
- Rare Books and Manuscripts Collections with many documents related to textiles and apparel.
The Industrial and Labor Relations Library houses the archives of the International Ladies Garment Workers Union (ILGWU) and other materials relevant to the textile and apparel industry past and present. The Africana Library contains material relevant to the study of textiles and dress.

VII. Financial Implications
Active programs of research in Apparel Design are ongoing at Cornell. Currently, the four apparel design graduate faculty members are involved in over ten research projects and several funded educational or outreach projects. These are supported by internal funding from the New York State College of Human Ecology, Entrepreneurship and Personal Enterprise endowment, Instructional Technology Grants program and by external funds from the National Textile Center, U.S. Dept. of Agriculture, New York Department of Labor, and other federal agencies, and industry. The total budget for funded apparel research was almost $300,000 in FY 2003-4. Appendix F lists the funded research of the Apparel Design graduate faculty for the past several years.

The Department of Textiles and Apparel has administered an average of 12-15 graduate teaching and research assistantships over the past five years. Four or five graduate teaching assistantships have been designated for Apparel Design students over this time. In addition, one graduate research assistantship has been funded consistently for three years and two more have been funded a semester at a time. Graduate students are encouraged to apply for college grants to support their Thesis research. Almost all MA students have been successful in receiving funding of $1100. This college grant program will be available to support Ph.D. research for up to $1500 for each student.

We expect internal funding resources to remain constant so that special efforts to acquire additional external funding to sponsor graduate students will be necessary. Appropriate RFP’s for new projects will be identified and proposals prepared that complement current faculty research and hold the potential for funding graduate research assistantships, research operating costs, and equipment. Foundations interested in our subject matter will also be pursued. Through the Cornell Cooperative Extension program, Apparel Industry Outreach, additional strategies will be developed to solicit contracts from industry to support graduate student research projects. We will also work with the Human Ecology Development office to clarify our needs for graduate student endowment sponsorship, especially for students conducting research using the Cornell Costume and Textile Collection and the 3D body scanner.
Appendix A

162 four year US Colleges and Universities have some course offerings in Apparel
24 of these have comprehensive Ph.D. programs that cover textiles and apparel

- Auburn University
- University of Arizona
- University of California at Irvine
- University of California at Davis
- Florida State University
- University of Georgia
- Southern Illinois University
- University of Illinois
- Iowa State University
- Kansas State University
- Purdue University
- Louisiana State University
- Michigan State University
- University of Minnesota
- University of Missouri
- University of Nebraska
- North Carolina State University, Greensboro
- University of North Carolina
- Ohio State University
- Oklahoma State University
- Oregon State University
- University of Tennessee
- Texas Woman’s University
- Virginia Tech

13 two year US Colleges and Universities have course offerings in apparel

80 four year international Colleges and Universities have course offerings in apparel
Twenty-eight of these offer PhD’s

- University of Alberta-Canada
- University of Central England
- University of Manchester-England
- University of Helsinki-Finland
- University Pantheon-Assas-France
- Hong Kong Polytechnic University
- Naruto University of Education-Japan
- Tokyo Gakugei University-Japan
- University of Otago-New Zealand
- Girls College of Ed/Home Economics and Art-Saudi Arabia
- Potchefstroom University-South Africa
- University of Pretoria-South Africa
- University of Stellenbosch-South Africa
- Chonnam National University-South Korea
- Chungnam National University-South Korea
- Ewha Womans University-South Korea
- Hanyang University-South Korea
- Hongik University-South Korea
- Keimyung University-South Korea
- Kyung Hee University-South Korea
- Kyung Pook National University-South Korea
- Mokpo National University-South Korea
- Sang Myung University-South Korea
- Seoul National University-South Korea
- Sungshin Woman’s University/Seongbuk-Gu-South Korea
- Yeungnam University-South Korea
- Yonsei University-South Korea
- National Taiwan Normal University-Taiwan

6 two year international Colleges and Universities have course offerings in apparel
Appendix B-Faculty Curriculum Vitae

Susan P. Ashdown
Associate Professor, Department of Textiles and Apparel, Cornell University

Education

Ph.D. in Apparel, University of Minnesota, Minneapolis, MN, 1991.
B.A. in Theater Arts, Grinnell College, Grinnell, IA, 1971.

Employment

1997-present - Associate Professor, Dept. of Textiles and Clothing, Cornell University
1991-1997 - Assistant Professor, Dept. of Textiles and Clothing, Cornell University
1990-1991 - U. of Minnesota - Teaching Assistant, Design, Housing, and Apparel
1989-1990 - U. of Minnesota - Research Assistant, Design, Housing, and Apparel
1987-1988 - Cornell University - Teaching Assistant, Textiles and Apparel
1980-1988 - Cornell University - Lecturer in Costume Technology, Costume Shop Manager, Theater Arts
1974-1975 - Berman Buckskin - Production Assistant
1971-1973 - University of Minnesota - Teaching Assistant, Theater Arts

Professional Activities

Invited co-presentation: "Fit and Finish”, Annual conference of the Textile and Needle Trades division of the American Society for Quality, with David Brunner of the Textile/Clothing Technology Center [TC]2

Invited lecture: “What is a Size 10?” Sonia Wolf Wilson Lectureship in Human Ecology at the University of Texas in Austin, October 27, 2000.

Invited Presentation: "Introduction to Sizing and Fit Research” FIT 2000, The Fit Symposium, May 19-20, Clemson University, Clemson, SC

Service to Department, College, and University

Search Committees: Apparel Extension, Apparel Design (chair), Textile Science positions
Design Curriculum Review Committee
Apparel PhD Development Committee
Mentoring committees for junior faculty (2)
College of Human Ecology Computer Lab Governance Committee

List of Publications (Selected)


In Press:


CHARLOTTE JIROUSEK Associate Professor
Department of Textiles and Apparel
Cornell University

208 Martha Van Rensselaer Hall

Ithaca, New York 14853
607/255-8064 (office) 607/255-1093 (fax)
caj7@cornell.edu
http://costume.cornell.edu:8080/

AREAS OF RESPONSIBILITY
August 1992 to present: 12 month, tenure track, 45% teaching, 30% research, and 25% curator of the Cornell Costume and Textile Collection.

EDUCATION

Ph.D., Design, Housing and Apparel, University of Minnesota, 1988
M.A., Applied Design, University of Minnesota, June 1982
B.A., Sociology, Hamline University, June 1960

PUBLICATIONS (Since 1992)

Articles in refereed journals


Chapters and Articles in Books (refereed)


Articles in Proceedings


In Press

“Ottoman Influences in Western Fashion.” Costumes and Identity in the Ottoman Empire [Boğaziçi University, Istanbul; spring 2004]

[The following chapters for inclusion in a refereed book, The Culture of Turkish Textiles and Dress, spring 2004]

Jirousek, Charlotte. “Carry it close to your heart: Exchanges of textiles associated with courtship and marriage.”

Jirousek, Charlotte. “Finding the Cloth for the Clothes: Traditional Weaving Technologies in Anatolian Turkey.”

Erdoğan, Zeynep and Jirousek, Charlotte. “Ankara (Angora) goat hair: The Turkish Mohair Tradition.” (C. Jirousek, translation)


Tansuğ, Sabiha. (C. Jirousek, Translator) The Turkish Culture of flowers.

In Review


Jirousek, Charlotte. “Islamic Textiles.” In Encyclopedia of Clothing and Fashion, Valerie Steele, ed. [Scribners, New York, no date]

Conference presentations:


Graduate Committee membership outside of Textiles and Apparel:

Ozbek, Nadir.
Committee member, Department of History (Ottoman History), Binghamton State University, NY. 2000, Ph.D.


Van Dyk Lewis
Assistant Professor, Department of Textiles and Apparel, Cornell University

Education

Ph.D., University of Central England, 2002
M.A. in Fashion /Textiles (Distinction), University of Central England, 1993
Post Graduate Diploma in Fashion / Textiles, University of Central England, 1992
Further Education Teaching Certificate, University of Salford, 1985
B.A. (Hons), Fashion Middlesex Polytechnic, 1983

Employment

2001 - Present - Assistant Professor in Apparel Design, Cornell University
1997 - 2001 - Head of Fashion, University of Salford
1986 - 1997 - Senior Lecturer in Fashion Design, University of Salford
1984 - 1985 - Lecturer in Fashion Illustration, University of Derby

Professional Activities and Recent Honors

1999 - 2001 - Program assessor at; De Montford University, England
1997 - 2001 - University College Northampton, England

Invited Presentations -

1996 - Fashion Trends: BBC Radio, Manchester
1999 - The work of Yinka Shonibare, Ikon Gallery, Birmingham

List of Publications (Selected)


Suzanne Loker  
Professor, Department of Textiles and Apparel, Cornell University  
J. Thomas Clark Professor of Entrepreneurship and Personal Enterprise

Education

Ph.D. in Educational Psychology, Kansas State University, 1981.  

Employment

1998-Present - Professor, Textiles and Apparel Department, Cornell University  
1993-1997 - Professor and Director, School of Family & Consumer Sciences, University of Idaho, Moscow, ID  
1987-1993 - Associate Professor, Department of Merchandising, Consumer Studies and Design, University of Vermont, Burlington, VT  
1981-1987 - Assistant Professor, Department of Merchandising, Consumer Studies and Design, University of Vermont, Burlington, VT  
1982-1991 - Chairperson, Department of Merchandising, Consumer Studies and Design, University of Vermont, Burlington, VT  
1977-1981 - Instructor, Department of Clothing, Textiles and Interior Design, Kansas State University  
1974-1977 - Assistant Professor and Graduate Assistant, Department of Clothing, Interior Design and Textiles, Washington State University  
1974 - Instructor, Spring semester, Department of Home Economics, Queens College of CUNY

Professional Activities and Recent Honors

2002 – Use of Body Scan Data, Best in Show Poster, National Textile Center  
2000-2003 - J. Thomas Clark Professor of Entrepreneurship and Personal Enterprise  

Service to Department, College, and University

2001 - University Land Grant Panel on Technology Transfer  
2002-Present - Department Extension Leader  
2001-Present - Human Ecology Grants Committee  
1998-Present - Graduate Faculty Member,  
2000-Present - Entrepreneurship and Personal Enterprise Faculty,

Major Outreach/Extension Projects

The Cutting Edge Guide to Apparel Business: An electronic guide for business start-ups in apparel and sewn products  
Entrepreneurship and Family Business Team for Cornell Cooperative Extension  
Topstitch, a biannual newsletter for the apparel and sewn products industry  
Work Skill Standards for High Performance Apparel Manufacturing

List of Publications (Selected)

Books, Book Chapters, and Monographs -  


House.


Refereed Journal Articles -


http://biodevelopments.org/ip/index.htm

http://www.tx.ncsu.edu/jtatm


Appendix C-Master’s Theses 1990-2003

Master's Theses for Apparel Design 1990-2003


Thesis TX295 1990 M527 Melnichuk, Pawalpat. Chasing the rising sun : a study of Thai garment companies exporting to Japan and the United States 1990

Thesis TX295 1992 K49 Kim, Sung Soo, 1967- Temperature analysis as the basis for designing a vest equipped with supplementary heating system to prevent cold 1992


Thesis TX295 1994 S675 Snyder, Susan M. Apparel to enhance upright posture in the elderly / by Susan M. Snyder. 1994


Thesis TX295 2003 M394 Mayer, Kirk M. (Kirk Michael), 1975- Relation of insulation type and coverage to dexterity and tactility in alpine cold weather hand gear / by Kirk M 2003


Appendix D-Texts for Apparel Professionals

PhD Program: Important texts for the educated apparel professional


ASTM Standard tables relating to sizing, fit, PS 42-70, ISO Standards


Brockman, H. Theory of Design


Hebdige, D., Hiding in the Light. Routledge, 1988


Appendix E-Selected Seminar Speakers in Apparel

**Selected Seminar Speakers in Apparel, 2001-2003**

**Donald Kloster, Smithsonian Museum**
Development Of The Army Sizing System: Size Two

**Dr. Edith Gazzulo, Clarity Fit**
The Utilization of 3-D Body Scan Data for Apparel Fit and Sizing

**Capt. Sean Ahrens, U. S. Army**
Fit Preference and Self Measurement in an Internet Model for Ordering Mass Customized Apparel

**Dr. Diane Scheurell, Kimberly-Clark Corp.**
The Use of Quality Function Development in Textile and Apparel Product Development

**Dr. Nancy Schofield, University of Wisconsin**
Analysis of Sizing and Grading Practices to Determine the Basis of Sizing U.S. Women's Clothing for the Upper Torso

**Professor Lance Compa, Industrial and Labor Relations**
The Garment Industry and Human Rights: National and International Dimensions

**Ms. Susan Greene, Cornell University**
The Copp Family Textiles - Smithsonian Collection dated 1750-1850

**Dr. Shelley Feldman, Dept. of Rural Sociology, Cornell University**
Coats and Shirts: Garment Production in New York and Bangladesh

**Mr. Onslo Carrington, Carrington Designs**
Design 2001

**Ms. Norma Rantisi, University of Toronto**
How New Industrial Districts Revive Older Ones: Locating the Lower East Side in the NYC Garment District's Innovation System

**Dr. Hongwei Hsaio, National Inst. for Occupational Safety and Health**
3-D Applied Anthropometry: Cases and Methods

**Mr. Gordon Leggett, Hunter Labs**
Color and Appearance Measurement

**Ms. Linda Norris, Riverhill**
Exploring Identity through Upstate Local History Collections

**Dr. Patricia Warner, University of Massachussetts**
Not a Thing to Wear: the Precursors of the Sportswear Industry

**Dr. Sundaresan Jayaraman, Georgia Tech**
Smart Shirt Research

**Dr. Susan Christopherson, City and Regional Planning, Cornell U.**
Can Wal-mart be Stopped, Limits to Global Retailing

Ms. Susan Greene, Visiting Fellow, Cornell University
On the Trail of a Clemens Dress

Grace Meacham, Prof. Emeritus, Univ. of Cincinnati
Clothing for the Seated Figure

Prof. Virginia Keyder, Bilgi University, Istanbul
Design Law Revisited: Comparing the US and EU

Dr. Norma Rantisi, Concordia University, Montreal
The Ascendance of New York Fashion

Prof. Andrew Dent, Material ConneXion
Better Living Through Material Innovations

James R. Campbell and Dr. Jean Parsons, Iowa State University
Collaborative Digital Textile and Apparel Design Research

Mary Brannon, VF Jeanswear
An Industry Perspective on the Advancement of Color

Prof. Sarah Bernstein, Dept of Theater, Film and Dance, Cornell Univ.
“Cap-a-pe”: Researching Costume and Character for the Theatre

Prof. Lenda Jo Connell, Dept. of Consumer Affairs, Auburn University
Body Shape Analysis for the Female Figure

Cheryl Gomes, Innovative Textile Solutions
Designing Military Uniforms with High Tech Materials

Betsy Dart, US ARMY, Natick
Designing the Air Warrior System for Optimized Human Performance

Dr. Janet Hethorn, University of Delaware
Observing Street Style: Methods and Ethics

Peter B. Hirtle & Kornelia Tancheva, Cornell Library
Digital Library Resources for Textile and Apparel Studies

Francine Gemperle, Carnegie Mellon University
Wearable Computing: Design for Interaction

Appendix F-Funded Research

S.P Ashdown
Funded Research

Ashdown, S. P. & Loker, S.
Use of body scan data to design sizing systems based on target markets. National Textile Center.5/01/03 to 4/30/04 ($211,135), 5/01/02 to 4/30/03 ($183,724); 5/01/01 to 4/30/02 ($163,462)
Ashdown, S. P. Occupational safety and health through the use of protective clothing. USDA Regional Research Project NC-170. 10/1/2002 to 9/30/2003 ($15,000)

Ashdown, S. P. Computer-aided design software for apparel patternmaking, grading, and custom fit, 18 stations, online software support, Lectra, Inc. industry donation. 2002

Connell, L. J. and Ashdown, S. P. Methods and system development for body scan analysis of posture and body shape for reengineering women’s patterns. National Textile Center, consultant. $8,000, 5/1/01 to 4/30/02

Ashdown, S. P. Enhancing community development through successful merchandising, producing, and distribution of innovative textiles and sewn products. USDA Regional Research Project W-194. 10/1/1999 to 9/30/2002 ($15,000 per year)


Ashdown, S. P. Three-dimensional body scanner for research in apparel sizing and fit. Rebecca Quinn Morgan Alumna Donation. 2001 ($50,000)

Loker, S. and Ashdown, S. P. Apparel manufacturing knowledge portal site www.apparelkey.com’ 1/15/01 to 7/15/01 ($10,758)

Ashdown, S. P. Development of sizing systems for mass customization of apparel. USDA (Hatch). 10/1/97 to 9/30/98 ($10,000)


Schwartz, P., Obendorf, K. and Ashdown, S. P. A program to develop test methods of microporous repellent materials to pathogenic fluids. Pallflex Products Corporation, 5/15/96 – 8/15/96 ($5,297)

Ashdown, S. P. Body configuration as a factor in the fit and sizing of clothing for mature women. President’s Council of Cornell Women. 6/1/96 – 8/15/96 (2,497)

Ashdown, S. P. Interactive apparel design: Collaborative learning through the internet. USDA Higher Education Challenge Grant. 8/19/95 – 9/14/98 ($158,000)

Ashdown, S. P. Design development of a protective gown for the health care industry. Laivan Corporation. 6/2/93 – 7/23/93 ($1276)


Watkins, S. and Ashdown, S. P. Seaplane pilot survival vest. Hydroplane Services, Industrial Extension project. 5/18/92 – 6/15/92 ($1,200)

Watkins, S. and Ashdown, S. P. Chemical protective suit design modifications and sizing’, Chemfab, Industrial Extension project. 6/15/92 – 11/15/92 ($14,246)

Ashdown, S. P. Computer analysis of video images as a means of assessing the fit of apparel on the human form. College of Human Ecology. 5/21/92 – 9/1/93 ($5,500) Funded Research

Loker, S. Designers as Entrepreneurs project. J. Thomas Clark Professor Project. 2000-2003 ($105,000), 2003-2005 ($40,000)

Christopherson, S. & Loker, S. The Creative Economy. Cornell Agricultural Experiment Station Hatch Project, 2003-2006. ($30,000 per year)

Dickson, M., Burns, L.D., Douglas, S., Eckman, S., Lennon, S., & Loker, S. Educators for Social Responsible Business research grant from USREES North Central Committee 65. ($1500)


Loker, S. Management of technological innovation in small and medium sized apparel manufacturing firms. Cornell Agricultural Experiment Station Hatch Project NYC-329404, 1999-2003. ($10,000 per year)


Loker, S. Privatization and Market Development in the Czech Apparel/Textile Industry, The Limited Fellowship coordinated by the International Textiles and Apparel Association (ITAA), 1995-6. ($1,000)


Loker, S. and Sullivan, P. Market structure and competitive advantage for apparel retail sales in Eastern
Europe. The Gap Faculty Development grant coordinated by the International Textiles and Apparel Association (ITAA), 1992-93. ($1,000)

Loker, S., Pelsue, N., and Schmidt, F. E. Computer-assisted Telephone Interviewing (CATI) Equipment Grant. Funded by the UVM Graduate College Research Advisory Committee, 1990. ($15,000)
C. Jirousek  
Funded Research  

2001 – Elizabeth Schmeck Brown Costume and Textile Gallery endowment. $50,000.

1998 Institute of Turkish Studies Summer Travel Grant $800

1997-Ankara University Research Grant. A proposal for field research on disappearing textile technologies in the Black Sea Region of Turkey. 1998-1999. Collaborative project with colleagues at Ankara University, Turkey. 350,000,000 Turkish Lira (approximately US $5,000) Co-Principal Investigator with Ankara faculty.

1996- American Research Institute in Turkey Grant: Survivals of Traditional Textile Technologies in Turkey. to support summer travel and research in Turkey May - July, 1996. $3,000. Principal investigator.


