**LEARNING OUTCOMES: Ph.D. in Fiber Science**

A **doctoral degree recipient** is expected to demonstrate superior mastery of knowledge in the discipline of Fiber Science and to synthesize and create new knowledge, making an original and substantial contribution to the discipline.

**Proficiencies**
- Establish general expertise in Fiber Science including
  - Theory and practice of fiber formation
  - Rheology of solids: dynamic mechanical analysis of fibers and polymers
  - Physical properties of fiber-forming polymers and fibers
  - Chemistry of textile finishes and dyeing
  - Properties of fibrous systems
- Make an original and substantial contribution to an area of Fiber Science
  - Think originally and independently to develop concepts and methodologies
  - Identify new research opportunities within the field of Fiber Science
  - Incorporate approaches, techniques, skills or knowledge connecting Fiber Science with other disciplines.
- Demonstrate advanced research skills
  - Synthesize existing knowledge via coursework and literature review.
  - Master application of research techniques, technical skills and analysis.
  - Present research motivation, methods and results in written and oral formats.

**Aspirational Goals**
*Cornell University has developed a set of core aspirational goals—competencies expected of all Cornell graduates that may not have explicit measurement scales. Many of these aspirational goals have been incorporated into the proficiencies established above. In addition, the following aspirational goals are expected of all research degree degree recipients. In Fiber Science these will be assessed by counting instances of occurrence.*
- Engage in formal or informal teaching with k-12, undergraduate or corporate populations
- Present results to broader professional audiences via peer reviewed papers or papers/posters presented at conferences.
- Explore interconnections
  - Focus on plural contexts and cultures
  - Respect research in other areas
  - Understand and articulate the impact of research on society
LEARNING OUTCOMES: M.S. in Fiber Science

A masters of science degree recipient is expected to demonstrate mastery of knowledge in the discipline of Fiber Science and perform original research.

Proficiencies

- Master concepts in Fiber Science such as
  - Theory and practice of fiber formation
  - Rheology of solids: dynamic mechanical analysis of fibers and polymers
  - Physical properties of fiber-forming polymers and fibers
  - Chemistry of textile finishes and dyeing
  - Properties of fibrous systems
- Plan and conduct research in an area of Fiber Science
  - Develop concepts and methodologies
  - Incorporate approaches, techniques, skills or knowledge connecting Fiber Science with another discipline.
- Demonstrate research skills
  - Master application of research techniques, technical skills and analysis.
  - Present research motivation, methods and results in written and oral formats.

Aspirational Goals

Cornell University has developed a set of core aspirational goals—competencies expected of all Cornell graduates that may not have explicit measurement scales. Many of these aspirational goals have been incorporated into the proficiencies established above. In addition, the following aspirational goals are expected of all research degree degree recipients. In Fiber Science these will be assessed by counting instances of occurrence.

- Engage in formal or informal teaching with k-12, undergraduate or corporate populations
- Present results to broader professional audiences via peer reviewed papers or papers/posters presented at conferences.
- Explore interconnections
  - Focus on plural contexts and cultures
  - Respect research in other areas
  - Understand and articulate the impact of research on society
LEARNING OUTCOMES: Ph.D. in Apparel Design

A doctoral degree recipient is expected to demonstrate superior mastery of knowledge in the discipline of Apparel Design and to synthesize and create new knowledge, making an original and substantial contribution to the discipline.

Proficiencies
- Establish general expertise in Apparel Design including
  - Human Factors: Anthropometrics and Apparel
  - Fashion Theory
  - Aesthetics and Meaning in World Dress
- Make an original and substantial contribution to an area of Apparel Design
  - Think originally and independently to develop concepts and methodologies
  - Identify new research opportunities within the field of Apparel Design
  - Incorporate approaches, techniques, skills or knowledge connecting Apparel Design with other disciplines.
- Demonstrate advanced research skills
  - Participate in research seminars in apparel design
  - Synthesize existing knowledge via coursework and literature review.
  - Master application of research techniques, technical skills and analysis.
  - Present research motivation, methods and results in written and oral formats.

Aspirational Goals
Cornell University has developed a set of core aspirational goals—competencies expected of all Cornell graduates that may not have explicit measurement scales. Many of these aspirational goals have been incorporated into the proficiencies established above. In addition, the following aspirational goals are expected of all research degree recipients. In Apparel Design these will be assessed by counting instances of occurrence.
- Engage in formal or informal teaching with k-12, undergraduate or corporate populations
- Present results to broader professional audiences via peer reviewed papers or papers/posters presented at conferences or exhibitions.
- Explore interconnections
  - Focus on plural contexts and cultures
  - Respect research in other areas
  - Understand and articulate the impact of research on society
LEARNING OUTCOMES: M.A. in Apparel Design

A masters of arts degree recipient is expected to demonstrate mastery of knowledge in the discipline of Apparel Design and perform original research.

Proficiencies
- Master concepts in Apparel Design such as
  - Human Factors: Anthropometrics and Apparel
  - Fashion Theory
  - Aesthetics and Meaning in World Dress
- Plan and conduct research in an area of Apparel Design
  - Develop concepts and methodologies
  - Incorporate approaches, techniques, skills or knowledge connecting Apparel Design with another discipline.
- Demonstrate research skills
  - Participate in research seminars in apparel design
  - Master application of research techniques, technical skills and analysis.
  - Present research motivation, methods and results in written and oral formats.

Aspirational Goals
Cornell University has developed a set of core aspirational goals—competencies expected of all Cornell graduates that may not have explicit measurement scales. Many of these aspirational goals have been incorporated into the proficiencies established above. In addition, the following aspirational goals are expected of all research degree degree recipients. In Apparel Design these will be assessed by counting instances of occurrence.
- Engage in formal or informal teaching with k-12, undergraduate or corporate populations
- Present results to broader professional audiences via peer reviewed papers or papers/posters presented at conferences.
- Explore interconnections
  - Focus on plural contexts and cultures
  - Respect research in other areas
  - Understand and articulate the impact of research on society