

Farm to Fashion: A Multidisciplinary Approach to Teaching Fiber Production, Sustainability, and Slow Fashion

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Most fashion programs focus on product development with mass-produced textiles from synthetic blends. Fashion students rarely understand the origins of fibers and the immense processes involved to create textiles. In our fashion design program we recognize that agriculture plays a crucial role in the production of fibers and thus contributes to the environmental impact caused by the fashion industry. Farm to Fashion is an initiative that utilizes university programs and resources that have a direct impact on the development of fibers, fabric, and fashion in a multidisciplinary approach to gain understanding and appreciation for sustainable and slow design at its origin. Our fashion program, which is part of the College of Agriculture, is uniquely positioned to benefit from faculty conducting research in the areas of organic gardening, horticulture, agriculture, wood science, textiles and design. Farm to Fashion utilizes those connections, building a curriculum that enhances student knowledge beyond the abstract through experiential learning.

In this circular and sustainable approach, students enrolled in the year-long course are able to apply and understand natural fiber production and processing first hand. By teaming up with faculty in areas that are directly involved in fiber development, fashion students are exposed to the complexities of soil management, ecosystems, animal welfare, and plant science. Students are able to see and handle fibers and livestock in their natural environment while also participating in the harvesting, processing and production of fibers in essentially a living classroom.

Students are introduced to specific aspects of fibers through guest speakers and field visits to the university's organic gardens, animal science farm, greenhouses and research laboratories. In test plots we currently grow organic cotton, flax, linen and hemp. In the field, the flax and linen go through the natural retting process. Hemp is more complex as most farmers see the value in the seed and oil production which means the plants go to seed, rendering the bast too coarse for fiber production. Students are charged to research the validity of the hemp fiber at different stages of growth. Our work is intended to assist the local hemp growers in seeing added value to their crops, creating economic opportunities.

At the animal science farms, sheep graze in a 480 acre pasture. This spring students will participate in shearing the fleece, then on a small scale the fleece will be cleaned, carded and prepped for dyeing in our Textile Lab. Larger quantities will be processed by a local fiber mill. In the organic garden we grow specific varieties of plants for natural dyeing. In the Textile Lab fiber samples are dyed by students who create methodical notebooks for future color matching. Students experiment with weaving, knitting, felting, fabric manipulation, paper making and screen printed yardage.

Directly related to this in-depth study is the biodegradability of natural fibers. Students are aware of the cradle to cradle impact their designs take on creating hyper-traceable runway fashion that quite literally began in the fields. As a result, they are motivated to integrate sustainable practices in their personal and professional lives. They feel empowered and able to make a positive impact in the fashion industry.

References

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