COLLEGE OF VISUAL ARTS AND DESIGN
ADES 4590 Fashion Design Studio
Digital Fabrication and Wearable Technology Prototyping
SYLLABUS
barbaratrippeer@my.unt.edu

Fall 2016 11:00 AM – 01:50 PM, MW
Class location: 150 Welch Street Complex #1
Instructor: Barbara Trippeer
E-mail: barbaratrippeer@my.unt.edu
Office Hours: 10:00 AM – 11:00 AM, T/W
Office: 121C, Welch Street Complex# 1

RATIONALE:
Inspired by The MET’s Costume Institute’s 2016 exhibition, Manus x Machina: Fashion in an Age of Technology, this course allow young designers to explore methods which reconcile the handmade and the machine-made in the creation of wearable technology prototypes, related ready-to-wear, and accessories.

COURSE DESCRIPTION:
This course will allow students to will learn how to envision, design, prototype and document their ideas through hands-on experience with a range of digital design and fabrication tools. Assignments involve designing and making something every week ranging from developing simple prototypes to building a digital fabrication machine, such as a 3D printer. Success will be measured through projects by a student’s acquired skills rather than time or examination.

Students will participate in focused lectures every week highlighting innovations and opportunities in the emerging world of digital and wearable technology with particular attention to garment and accessory applications. In addition, there are lab days each week where students have access to the digital fabrication equipment and local expertise for personal help with assignments.

This course is designed as a fast-paced, intense hands-on learning experience with assessment projects being completed each week. Students document their projects continuously building up a unique online personal portfolio of creative and technical achievements.

COURSE OBJECTIVES:
• Equip students with the mindsets and methods of basic wearable technology design prototyping using the Flora starter kit by Adafruit, the UNT fab lab, and 3D printing.
• Allow students to experiment with design prototyping for both sensor embedded garments or accessories
• Educate students to code basic patterns and incorporate opportunities for wearable technology concept development
• Inspire students to approach challenges differently and experience how alternative formats for design can add new perspectives to your own work tackling apparel related challenges
• Facilitate hands-on experience speaking to, prototyping for, and testing solutions with emerging technologies

REQUIRED SUPPLIES & TEXT BOOKS:
• Getting Started with Adafruit Flora Bookpack ($99.95) Complete starter kit with supplies and textbook (https://learn.adafruit.com/getting-started-with-flora)
• Basic woven twill, denim, or canvas fabric (student choice) for simple prototyping and experimentation (recommended 5 yards)
GRADING & EVALUATION:

- Projects: 800 points
  - Project 1: Digital Printing Basic Item: 200 pts
  - Project 2: LED Basic Accessory Trial: 200 pts
  - Project 3: Conceptual Project: 400 pts
- Design Development Blog/Participation: 100 points
- Tech Designer Research/Presentation: 100 points

Total: 1000 points

A (excellent): grade point total of 900 – 1000 with good attendances
B (good): grade point total of 800 – 899 with good attendances
C (average): grade point total of 700 – 799 with good attendances
D (below average): grade point total of 600 – 699 with good attendances
F (fail): grade point total of 0 – 599

INSTRUCTOR'S POLICIES:

1. ATTENDANCE - Students are expected to attend class, arriving in a punctual manner. Roll will be taken at the beginning of the class. If the student misses roll, it will be the student's responsibility to see the instructor after class to gain credit for attendance. The student is responsible for all material covered during any class missed, and should take the initiative to meet with a classmate to acquire missed information.

   Every 3rd tardy will convert to an unexcused absence.
   The 3rd unexcused absence will cause a final grade reduction of one letter grade. For each additional 3 absences, the grade will be lowered another letter grade.
   (For example, if a student has earned an "A" in the course, but has accumulated 6 unexcused absences, the student will receive a "C" in the class)
   A written excuse for an absence must be presented upon the first day returning from the absence(s) in order to be considered.

2. PROJECTS - Projects MUST be turned in to the instructor at the beginning of the class and ready for the in-class critique. No late work will be accepted for grade. Excused attendance late work must be accompanied by a written excuse upon the first day the student returns to class and the late work will ONLY BE ACCEPTED ON THAT DAY AND WITH ONE LETTER GRADE REDUCTION.

3. E-MAILING THE INSTRUCTOR - Students are expected to attend class, take notes, keep all handouts and course information, utilize class time for questions and discussion, and refer to the textbook for further clarification of information. If a student is still having difficulties then an appointment should be made during the instructor's office hours to
discuss the matter. E-mailing the instructor for missed class assignments, course or assignment grades, or to answer and individual question is prohibited. Your questions will benefit others and should be saved for class. Instructor email is NOT to be utilized as your private tutoring tool.

4. **RESPONSIBILITY CHECKING E-MAILS & FASHION DESIGN BLOG** – Students should check e-mails and blog postings periodically, http://untfasdes.blogspot.com, for internships, competitions, scholarships, school important information, and so forth.

5. **STUDIO ETIQUETTE**
   a. You may use your designated dress form for class exercises, or any other equipment accessible in the designated classroom (Welch Street 150) for any projects through the entire semester.
   
   b. Do not mark on any dress form, or any other equipment, in any way.
   
   c. DO NOT leave your projects or materials when you leave it either from class or a work period.

6. Students should bring their own materials, LED sensor equipment, and sewing tools to the class when working on the projects.

7. **MAINTENANCE** - Students should maintain the sewing machines, dress forms, as well as the working area. Students are required to clean their working areas 5 minutes before end of class.

8. Basic commercial sloper patterns are permissible to use for class assignments and projects, as long as they are altered by at least 75% in order to achieve the LED or other digital fabrication technique. The focus of this course is on technique and execution.

9. If you are in need of a letter of recommendation from the instructor, below is a list of requirements to be eligible for a letter.
   
   a. You must have completed at least 2 studio classes with me and earned a “B” or better with excellent attendance.
   
   b. The instructor needs a two-week notice when you give the request.
   
   c. Request must be given in written form with the information of who/or what this letter is to be written to.

10. **ACADEMIC INTEGRITY** - UNT’s policy on academic integrity can be found here: http://policy.unt.edu/sites/default/files/untpolicy/pdf/7-Student_Affairs-
Academic Integrity.pdf. The definitions of cheating and the consequences for cheating are enforced in this course.

11. FIBERS CLASSROOMS AND EQUIPMENT - The Fibers classrooms and equipment are not part of the Fashion Design Department and are off limits to students not currently enrolled in Fibers classes.

12. The instructor of record determines all grades for each project, in class work, and attendance.

STUDENT ACADEMIC PROGRESS:
Financial Aid Satisfactory Academic Progress - Undergraduates
A student must maintain Satisfactory Academic Progress (SAP) to continue to receive financial aid. Students must maintain a minimum 2.0 cumulative GPA in addition to successfully completing a required number of credit hours based on total registered hours per term. Students cannot exceed attempted credit hours above 150% of their required degree plan. If a student does not maintain the required standards, the student may lose their financial aid eligibility.

If at any point you consider dropping this or any other course, please be advised that the decision to do so may have the potential to affect your current and future financial aid eligibility. Please visit http://financialaid.unt.edu/satisfactory-academic-progress-requirements for more information about financial aid Satisfactory Academic Progress. It may be wise for you to schedule a meeting with an academic advisor in your college or visit the Student Financial Aid and Scholarships office to discuss dropping a course being doing so.

CENTER FOR STUDENT RIGHTS AND RESPONSIBILITIES: The following statement reminds students of their rights and responsibilities within the academic community – “Each University of North Texas student is entitled to certain rights associated with higher education institutions. See www.unt.edu/csrr for further information.”

INCLUSIVITY STATEMENT:
UNT’s College of Visual Arts and Design (CVAD) understand that our students and faculty represent a rich variety of backgrounds and perspectives. The Fashion Design program is committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:
• Share their unique experiences, values and beliefs
• Be open to the views of others
• Honor the uniqueness of their colleagues
• Appreciate the opportunity that we have to learn from each other in this community
• Value each other’s opinions and communicate in a respectful manner
• Keep confidential discussions that the community has of a personal (or professional) nature
AMERICAN DISABILITIES ACT: “The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at http://www.unt.edu/oda. You may also contact them by phone at 940.565.4323.

DISABILITIES ACCOMMODATION: Please notify the instructor if you have a disability that requires accommodation. It is also required that you register with the UNT Office of Disability Accommodation, Student Union, Room 318. The College of Visual Arts and Design policy on accommodation is available upon request in the CVAD Dean’s offices, Room 107. Further questions and problems on accommodation may be addressed to Associate Dean Eric Ligon, School Accommodation Liaison, Art Building, Student Advising, Room 111.

COURSE RISK FACTOR: This course has a level 3 rating for risk. Students are exposed to some significant hazards but are not likely to suffer serious bodily harm. The industrial sewing machines, irons, scissors, digital printers, and sensor electronics used can be dangerous if not used responsibly.

BUILDING EMERGENCY PROCEDURES: In case of emergency (alarm will sound), please follow the building evacuation plans posted on each floor of your building and proceed to the nearest parking lot. In case of tornado (campus sirens will sound) or other weather related threat, please go to the nearest hallway or room on your floor without exterior windows and remain there until an all clear signal is sounded. Follow the instructions of your teachers and act accordingly. For Welch Street Complex #1, the Texas Fashion Collection are the designated shelters.

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Tentative Course Schedule

<table>
<thead>
<tr>
<th>Week/Dates</th>
<th>Monday</th>
<th>Wednesday</th>
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<tbody>
<tr>
<td>Topic</td>
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<tr>
<td>Week 1</td>
<td>August 29-31</td>
<td>August 29 Monday</td>
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</tr>
<tr>
<td>Course Introduction</td>
<td>Review of syllabus, discussion of course &amp; expectations</td>
<td>Lecture 1: WT applications</td>
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<tr>
<td>WT Overview Intro to Audrey</td>
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<td>Intro to Audrino</td>
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<tr>
<th>Week 2</th>
<th>September 5-7</th>
<th>September 05 Monday</th>
<th>September 07 Wednesday</th>
<th>Launch of Project 1 3D printed basic item, see week 2 readings: Wearables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Fabrication</td>
<td>Labor Day holiday No class</td>
<td>Lecture 2: Digital Fabrications</td>
<td>Open lab: 3D print design (playing with software, designing your files)</td>
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<tr>
<th>Week 3</th>
<th>September 12-14</th>
<th>September 12 Monday</th>
<th>September 14 Wednesday</th>
<th>Launch of Project 2 LED basic Accessory, see week 4 readings: Fashion &amp; Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Fabrication</td>
<td>Training in UNT CVAD Digital Fab Lab Launch Digital Fab Prototype Project</td>
<td>Lecture: Smart Fabrics &amp; E Textiles, getting started with Audrey</td>
<td>Open lab: Adafruit Flora kit</td>
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<thead>
<tr>
<th>Week 4</th>
<th>September 19-21</th>
<th>September 19 Monday</th>
<th>September 21 Wednesday</th>
<th>Launch of Project 2 LED basic Accessory, see week 4 readings: Fashion &amp; Technology</th>
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</thead>
<tbody>
<tr>
<td>Smart Fabrics &amp; E Textiles</td>
<td>Lecture: Smart Fabrics &amp; E Textiles, getting started with Audrey</td>
<td>Open lab: Adafruit Flora kit</td>
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<tr>
<th>Week 5</th>
<th>September 26-28</th>
<th>September 26 Monday</th>
<th>September 28 Wednesday</th>
<th>Tech Designer Research profile selected, see week 5 readings: Smart Clothing</th>
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<tbody>
<tr>
<td>Tech Designer Research profiles selected, process critiques</td>
<td>Process Critiques: Group A Process Critiques: Group B</td>
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<tr>
<th>Week 6</th>
<th>October 3-5</th>
<th>October 3 Monday</th>
<th>October 5 Wednesday</th>
<th>Journal entry electronically submitted, see week 6 readings: Circuits &amp; Sensors</th>
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<tbody>
<tr>
<td></td>
<td>Open lab: digital fab &amp; LED sensors</td>
<td>Open lab: digital fab &amp; LED sensors</td>
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<tr>
<th>Week 7</th>
<th>October 10-12</th>
<th>October 10 Monday</th>
<th>October 12 Wednesday</th>
<th>Journal entry electronically submitted, see week 7 readings: Smart Fabrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects 1 &amp; 2 due Guest Speaker- Brian Wellhouse</td>
<td>Discussion: Circuits &amp; Sensors, Projects 1 &amp; 2 due Guest Speaker</td>
<td>Brian Wellhouse - Sensor Tech</td>
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### Course Information

**College of Visual Arts and Design**  
ADES 4590 Fashion Design Studio  
Digital Fabrication and Wearable Technology Prototyping  
**Syllabus**  
barbaratrippeer@my.unt.edu

| Week 8  | October 17-19  | Concept development: Project 3  | October 17 Monday  | Conceptual Development Project 3  | October 19 Wednesday  | Skype Guest speaker  
PETA BUSH, UK based  
Jewelry designer, Wearable Well-Being  | Journal entry electronically submitted, see week 8 readings: Fashion Tech Designers |
|---------|----------------|--------------------------------|-------------------|----------------------------------|-----------------------|--------------------------|------------------------------------------------------------------|
| Week 9  | October 24-26  | Open lab: Project 3  
Touch base: Designer Research Projects  | October 24 Monday  | Open lab: Project 3  
Group A touch base on Tech Designer Profile Research Project  | October 26 Wednesday  | Open lab: Project 3  
Group B touch base on Tech Designer Profile Research Project  | Journal entry updates electronically submitted |
| Week 10 | October 31-November 2  | Process Critique- Project 3 development  | October 31 Monday  | Group A: Process Critique Project 3  | November 2 Wednesday  | Group B: Process Critique Project 3  | Journal entry updates electronically submitted |
| Week 11 | November 7-9  | Open lab- Project 3 development  | November 7 Monday  | Open lab Project 3  | November 9 Wednesday  | Open lab Project 3  | Journal entry updates Electronically submitted |
| Week 12 | November 14-16  | Tech Designer Study presentations  | November 14 Monday  | Group A presents  | November 16 Wednesday  | Group B presents  | Due: FINAL Blog Entries due online |
| Week 13 | November 21-23  | FINAL Project 3 presentations  | November 21 Monday  | Group A presents  | November 23 Wednesday  | Group B presents  | Due: FINAL Conceptual Projects |
| Week 14 | November 28-30  | Turn in Final Projects and Classroom Wrap-up  | November 28 Monday  | Group A turns in final project  | November 28 Wednesday  | Group B turns in final project  | Final project submissions due in class |
| Week 15 | December 5-7  | Feedback and Assessments  | Feedback and Assessments  | Feedback and Assessments  |
| Week 16 | December 12-14  | Grades due to registrar  | | |

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**Permission to Use Student Work:**

1. **Grant of Permission.** I, the undersigned, am a student at the University of North Texas (UNT) and I am enrolled in ADES 4590 Fashion Design Studio. By my signature below I hereby grant permission to UNT to use, copy, reproduce, publish, distribute or display any and all works created to comply with the requirements of this course in accordance with the terms set forth below. Additionally I consent to the disclosure of the work created in this class as may be accompanied by my name and other personally identifiable information for purposes as set forth below.

2. **Scope of Permission.** This permission extends to the use of the described work and images of such work: (1) for academic purposes in order to demonstrate examples
of student work to current and future UNT students; (2) for public display in the galleries or on the campus of the UNT or on the UNT website; (3) for promotional materials created by UNT in all forms of media now known or later developed, including but not limited to exhibition catalogues, direct mail, websites, advertising and classroom presentations. My permission is ongoing and will continue until such time as I revoke it by giving UNT three months written notice of revocation to the professor of record for this course. UNT will have three months from the date of my notice to stop all use in accordance with this permission.

3. Certificate of Ownership. I am the owner of all work submitted in accordance with the requirements of the named course and the work is not subject to any grant or restriction that would prevent its use consistent with this permission. All aspects of the work are original to me and have not been copied. I understand that as owner of the work I have the right to control all reproduction, copying and use of the work in accordance with U.S. copyright laws.

4. Privacy Release. I hereby authorize and consent to the release, maintenance and display of my name if necessary and any other personally identifiable information that I have provided in connection with the work and its use in accordance with the terms of this Agreement.

5. Signature. By signing below I hereby grant the permissions indicated above. I understand that this grant of permission relates only to the use of the described work. This is not an exclusive right and I may sell, give or otherwise transfer the rights to such work to others on a non-exclusive or exclusive basis. However, in the event that I do sell, give or otherwise transfer ownership or the exclusive right to use my work to another party, I will notify UNT immediately in writing through the professor of record for this course. UNT will have three months from the date of my notice to stop all use in accordance with this permission.

I __________________________ (print) acknowledge that I have read the course syllabus. I understand the course structure, grading and attendance policies as well as the risk factor rating. I hereby agree to the syllabus and its provisions.

ADES 4590 - 3
Course Number, Section Student Phone Number (print) Risk Rating

Student UNT E-mail Address (print)

08-29-2016
Student Signature Date

Barbara Trippeer 08/29/2016
Faculty Name Faculty Signature Date