**Syllabus Overview**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Technical Design Studio</th>
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</thead>
<tbody>
<tr>
<td>Course Designator</td>
<td>ADES</td>
</tr>
<tr>
<td>Course Number</td>
<td>3227</td>
</tr>
<tr>
<td>Section Number</td>
<td>01</td>
</tr>
<tr>
<td>Semester and Year</td>
<td>Fall, 2019</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class Meeting Days &amp; Time</th>
<th>Tues/Thurs 1:55-4:55pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>205-216 McNeal</td>
</tr>
<tr>
<td>Number of Credits</td>
<td>4</td>
</tr>
<tr>
<td>Final Exam Date &amp; Time</td>
<td>8-10am Monday, December 16. Exam time will be used for final project presentation/submission only if needed.</td>
</tr>
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**Instructor’s Information**

<table>
<thead>
<tr>
<th>Name</th>
<th>Dr. Lucy Dunne</th>
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</thead>
<tbody>
<tr>
<td>Office Location</td>
<td>356 McNeal Hall (office) / 322 McNeal Hall (lab)</td>
</tr>
<tr>
<td>Office Phone</td>
<td>612-626-5901</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:L.dunne@umn.edu">L.dunne@umn.edu</a></td>
</tr>
<tr>
<td>Office Hours</td>
<td>By appointment</td>
</tr>
</tbody>
</table>

**Course Information and Instructor’s Expectations**

**Course Description:** Technical development of sewn product for production. Variability in human physical sizes, and grading and fit across a population. In team-based projects, you will develop a sewn product pattern; generate prototypes and technical specifications; source materials; and plan, execute, and evaluate a production run for a sewn product.

**Course Prerequisites:** ADES 2213, ADES 3223 with grade of C or above

**Required and Recommended Materials:**

- **Required Texts**
  - Other readings will be distributed in class or on the Moodle site.

- **Recommended Text**

- **Supplemental Texts**

**Supplies:** Patternmaking and sewing equipment, muslin, drawing supplies. Major project supplies provided.

**Established Course Objectives:**
Mastery of technical specification of apparel and communication through the product development process. Understanding of fitting, grading, technical communication methods, marker-making, production planning, and production analysis.

**Student Learning Outcomes following course completion:**
1. **Can identify, define, and solve problems** related to the design and production of mass-manufactured sewn products. Learning will be assessed through structured exercises and design projects
2. **Have mastered a body of knowledge and a mode of inquiry** through readings and research. Knowledge will be applied through the garment and production design process (mode of inquiry) in exercises and design projects. Learning will be assessed through evaluation of the components and end product of these processes
3. **Can communicate effectively** with teammates and remote collaborators throughout the design and development process, and articulate design elements effectively through the technical package. Learning will be assessed through project components and peer evaluation.
**Release of Work Statement:**
Students understand that enrollment in this course grants consent for their work to be selected for inclusion in college or departmental publications (online or in print). Your instructor may select to use your work to represent her/his skills as an instructor in a teaching portfolio (online or in print).

**Attendance:**
Attendance is mandatory for all class sessions, and punctuality is essential. Unless given specific permission, you must stay for the entire class period. Peer and instructor interaction are one of your most valuable resources in a studio course. You are encouraged to take advantage of the scheduled class time to seek my feedback and that of your peers, and to share your experiences so that others might benefit as well. You are expected to participate in class discussions and critiques, and be respectful and polite when critiquing classmates’ work. 3 or more absences will result in a grade reduction of two letter grades from the final course grade (eg, an A in the course would become a C). 5 absences will result in an F for the course. Each late departure or unexcused absence will count against your participation grade. Assigned work is due at the beginning of each class, and will otherwise be considered late. Late work will be accepted at the beginning of the next class period, with a penalty of one letter grade. No work will be accepted more than one class period late.

The following reasons justify absences and makeup requests and must be documented: (a) illness certified by the Boynton Health Service or another physician (b) death parent, sibling, or grandparent (proof of funeral attendance must be supplied), (c) participation in religious observances with advance instructor notification (d) participation, certified by the Office for Student Affairs (Office of the Registrar-St. Paul, 190 Coffey Hall), in University approved co-curricular activities.

**Workload:**
There is one major project for the course, which involves designing and mass-producing a sewn product. This project is broken into multiple components, some of which will be completed individually and some of which will be completed in small groups. Project components are informed through reading assignments. In addition, a series of grading and garment specifications exercises will be completed prior to the major course project. Because teamwork is a necessary and vital component of the success of a design team, your professionalism and teamwork will be evaluated for the whole course as well as in individual project components. Details for projects and exercises will be given in individual assignment sheets.

**Grading Structure:**
http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html
A grading rubric will be provided for each assignment, and will outline the criteria for evaluation for the specific assignment. If these criteria are not clear, it is your responsibility to ask for clarification. Your course grade will be calculated from your weighted project grades, as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
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<tbody>
<tr>
<td>Participation, professionalism, and teamwork</td>
<td>5%</td>
</tr>
<tr>
<td>Grading and garment measures exercises</td>
<td>20%</td>
</tr>
<tr>
<td>- POM garment measuring exercise</td>
<td>5%</td>
</tr>
<tr>
<td>- Manual grading exercise</td>
<td>5%</td>
</tr>
<tr>
<td>- OptiTex grading and grade rule exercise</td>
<td>5%</td>
</tr>
<tr>
<td>- Production planning exercise</td>
<td>5%</td>
</tr>
<tr>
<td>Course project</td>
<td>75%</td>
</tr>
<tr>
<td>- Design</td>
<td>5%</td>
</tr>
<tr>
<td>- Technical flats and design specs</td>
<td>15%</td>
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<tr>
<td>- Preliminary pattern/construction specs</td>
<td>15%</td>
</tr>
<tr>
<td>- Samples, fitting, and final pattern</td>
<td>30%</td>
</tr>
<tr>
<td>- Marker, production plan and QA plan</td>
<td>20%</td>
</tr>
<tr>
<td>- Production and QA evaluation</td>
<td>15%</td>
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Letter grades are determined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93.3%</td>
</tr>
<tr>
<td>B</td>
<td>83%</td>
</tr>
<tr>
<td>C</td>
<td>73%</td>
</tr>
<tr>
<td>D</td>
<td>63%</td>
</tr>
<tr>
<td>A-</td>
<td>90%</td>
</tr>
<tr>
<td>B-</td>
<td>80%</td>
</tr>
<tr>
<td>C-</td>
<td>70%</td>
</tr>
<tr>
<td>F</td>
<td>below 60%</td>
</tr>
<tr>
<td>B+</td>
<td>86%</td>
</tr>
<tr>
<td>C+</td>
<td>76%</td>
</tr>
<tr>
<td>D+</td>
<td>66%</td>
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**Accepting and Returning Assignments:**
Assignments are due at the beginning of class on the specified due-date. Assignments are generally returned within 1-3 weeks, depending on the size and detail of the assignment. Immediate feedback is always available during the project development process, in class or by email. (Please note that while I try to return emails as quickly as possible, at times it is not possible to return emails immediately.) Assignments are returned as soon as they are graded, usually over Canvas.

**Grading Late Work:**
Late work is accepted at the beginning of the class session following the due date (no later), with a penalty of 10% of possible points on the assignment.
Policy for Missed Exams:
There are no exams in this course. Late exercises and projects are subject to the late work policy above.

Make Up Work for Legitimate Absences:
http://www.policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html

Extra Credit Options:
Extra credit options are rare in this course, but should opportunities arise they will be announced in class.

University Policies

Personal Electronic Devices in Classroom:
http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html

Use of Class Notes and Materials:
http://policy.umn.edu/Policies/Education/Education/CLASSNOTESTUDENTS.html

Scholastic Dishonesty and Student Conduct Code:
http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html

Sexual Harassment:
http://policy.umn.edu/hr/sexualharassment

Statement on Climate of Inclusivity:
You are expected to be attentive during class, ask questions if you do not understand something, and to offer your opinion. You are also expected to listen respectfully to other students and to me when speaking. The University of Minnesota is committed to providing a safe climate for all students, faculty, and staff. All persons shall have equal access to its programs and facilities without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation. Racism, sexism, homophobia, classism, ageism and other forms of bigotry are inappropriate to express in this class. Reports of harassment are taken seriously, and there are individuals and offices available for help.
(or refer to http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EO_AA.pdf)

Academic Freedom and Responsibility:

Availability of Disability and Mental Health Services:
The University of Minnesota is committed to providing all students equal access to learning opportunities. The Office of Equity and Diversity has a Disability Resource Center (DRC) that works with students who have disabilities to provide and/or arrange reasonable accommodations.

- Students who have, or think they may have, a disability (e.g. mental health, attentional, learning, vision, hearing, physical or systemic), are invited to contact DS to arrange a confidential discussion at 612-626-1333 (V/TTY) or drc@umn.edu.
- Students registered with DRC, who have a letter requesting accommodations, are encouraged to contact the instructor early in the semester to discuss accommodations outlined in their letter.

For additional information please visit: https://diversity.umn.edu/disability/

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via www.mentalhealth.umn.edu or contact Counseling/Consulting Services at 612-624-3323.

Academic Services:
If you would like additional help, please contact one of the offices listed below.
Student Writing Support http://writing.umn.edu/sws/index.html
Student Academic Success Service http://www.uccs.umn.edu/
### Course Schedule*** *(Readings assigned on day listed in schedule, generally due next class period)*

<table>
<thead>
<tr>
<th>Week</th>
<th>Tues</th>
<th>Thurs</th>
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| 9/3  | Course Intro  
Flats, POM, and garment measurement  
*Reading: TSD Ch 4 & 15, EGSPM p 170-175* | Intro to stitches and seams, production flow  
*Reading: TSD 1st ed. Ch 8 & 9 (TSD 2nd ed. ch 9), consult ch 10-13 as needed* |
| 9/10 | **Online Lesson: ISWC conference travel**  
Anthropometrics, Sizing, Manual Grading  
*Video: manual grading* | **Online Lesson: ISWC conference travel**  
OptiTex Grading  
*Video: OptiTex Grading series* |
| 9/17 | Production project assigned  
Production planning (schedule), sourcing, and design | Design: consultation with client, final illustration development  
*Reading: EGSPM p49-51, consult TSD Ch 5 & 6* |
| 9/24 | Field Trip: ADES/RM Career Fair: St Paul Student Center  
**Due: Design**  
**Due: Grading and Garment Specs exercise pack**  
Tech sketch, Bill of Materials, prelim. specs  
Materials costing  
*Reading: EGSPM p52-61, consult TSD Ch 5 & 6 for terminology and illustration technique* | Field Trip: Sourcing  
*Reading: TSD Ch 10, 11, 13 (consult) EGSPM p62-67, 158-160* |
| 10/1 | **Due: Flats and Specs**  
Patternmaking, construction specifications  
Labor costing  
*Reading: EGSPM p176-180* | Patternmaking: individual pattern consults |
| 10/8 | **Due: Pattern**  
Sample making, grade/product assortment  
*Reading: EGSPM p81* | First sample  
*Reading: TSD Ch 16, review Ch 15* |
| 10/15 | **Due: First sample**  
1st fit session—fit report due by end of class | Sample revision |
| 10/22 | **Due: Second sample**  
Second fit session, final tech specs, sample photos  
*Reading: review TSD Ch 4* | Final pattern development and grading  
POM specification development |
| 10/29 | **Due: Final pattern and specs**  
Marker-making and production planning  
*Reading: EGSPM Ch 4 & 5 Moodle: Batch, UPS, Modular production*  
*Video: OptiTex marker-making* | Marker-making and production planning  
Quality Assurance pre-cutting and in-line quality control  
*Reading: TSD Ch 7* |
| 11/5 | **Due: Production & QA plan, marker**  
Marker finalization and printing | Intro to Cutting |
| 11/12 | Cutting and production | Cutting and Production |
| 11/19 | Production phase 2 re-design  
Production | |
| 11/26 | Production | **NO CLASS – Thanksgiving** |
| 12/3 | **QA Assessment Planning**  
Final production | **PRODUCT SHIPS: QA assessment**  
Due: Finished product |
| 12/10 | **Due: Production post-analysis, QA evaluation**  
Course wrap-up, Studio cleanup | |

***This schedule is subject to change***