

# COLLEGE OF DESIGN

## UNIVERSITY OF MINNESOTA Syllabus Overview: Apparel Design Studio IV

Course Designator	ADES	Section Number	01
Course Number	3224W	Semester and Year	Spring 2017

Class Meeting Days & Time	Mon/Weds 9:35-12:35
Classroom	McNeal 205-216
Number of Credits	4
Final Exam Date & Time (Also state if there is NO final)	10:30 a.m.-12:30 p.m., Wednesday, May 10 <sup>th</sup> . Exam time will be used for final project presentation/submission only if needed.

### Instructor's Information

Name	Dr. Lucy Dunne
Office Location	356 McNeal Hall
Office Phone	612-626-5901
Email	LDunne@umn.edu
Office Hours	By appointment

### Course Information and Instructor's Expectations

#### Course Description:

This class uses an engineering design process to analyze and meet the functional needs of specific user groups. We will be designing clothing that protects users from environmental conditions, and that facilitates and/or expands body function and movement. A theoretical understanding of human anatomy and movement is applied through advanced patterning techniques for a variety of body types, work environments, and activities. Class projects are often conducted with an outside partner. Project work focuses on developing skills in finding, synthesizing (in written and visual form) and using evidence to inform the design of a solution to a user-centered problem. Written documentation, developmental prototypes, and final design solutions are produced and evaluated.

#### Required and Recommended Materials:

##### Required text

Watkins, Susan and Dunne, Lucy E. (2015). Functional Clothing Design: From Sportswear to Space Suits. New York: Fairchild Books.

Other readings will be distributed in class or on the Moodle site.

#### Student Learning Outcomes following course completion: *(must identify at least one outcome and how it relates to this course how it will be addressed and how it will be assessed, <http://www.slo.umn.edu/>)*

1. *Students in this course will be able to identify, define, and solve problems* using an engineering design process. Learning will be assessed through structured deliverables in two design projects, with emphasis on identifying criteria and methods for evaluating design solutions
2. *Students in this course will have mastered a body of knowledge and a mode of inquiry* through readings and research. Knowledge will be applied through the engineering design process (mode of inquiry) in two design projects. Learning will be developed and assessed through evaluation of these design projects and through reading quizzes.

As a WI course, explicit emphasis is placed on developing information synthesis skills for design through writing in the form of a research paper, original research investigation, and summative design presentation.

#### 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 and be respectful and polite in class discussions and critiques. 3 or more absences will result in a grade reduction of two letter grades from the final course grade (e.g., an A in the course would become a C). 5 absences will result in an F for the course.

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:**

**Reading**

This course requires more reading than most studio courses. It is essential that you complete all of the reading, and allow yourself time to process and understand the reading. I am always available to clear up confusion or questions. Reading assignments accompany each of your foundation modules, assigned in the order that makes the most sense for your group. For each module, you will complete three "question cards" which will be submitted via Moodle. These can be points of confusion, examples that illustrate concepts in the text, or questions that extend concepts discussed in the text.

**Quizzes**

Quizzes accompany each foundation module, and will be used to evaluate your comprehension of topics covered in the module with an emphasis on the module's reading. Quizzes are open-book (but not collaborative) and cover reading and course material covered since the previous quiz. They should be completed on Moodle at the end of each module. All modules (including reading and quizzes) must be completed by the due date as indicated in the course schedule.

**Projects**

There is one major project for the course, which is broken into two individual sections and one group section. Each section of the project includes written deliverables, focusing on different types of written communication. Drafts will be submitted for two of these sections, and revised before final submission. Details for project sections will be given in 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:

Quizzes, exercises, and question cards	20%
Class participation and professionalism	5%
Course project:	75%
-Research report	25%
-Preliminary prototypes and testing	25%
-Final prototypes, testing, and NASA presentation	25%

Letter grades are determined as follows:

A	93.3%	B	83%	C	73%	D	63%
A-	90%	B-	80%	C-	70%	F	below 60%
B+	86%	C+	76%	D+	66%		

**Accepting and Returning Assignments:**

Most work (except for physical components such as prototypes) will be submitted digitally, through Moodle. Assignment comments and grades are in general posted on the course Moodle site.

**Grading Late Work:**

Assigned project work and exercises are 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.
<b>Policy for Missed Exams:</b> Quizzes must be completed by the beginning of class on the due date, and no late submissions will be accepted, except in the case of a university-excused absence.
<b>Make Up Work for Legitimate Absences:</b> <a href="http://www.policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html">http://www.policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html</a>
<b>Extra Credit Options:</b> Extra credit options are rare, and will be announced in class if and when they arise.

### University Policies

<b>Personal Electronic Devices in Classroom:</b> <a href="http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html">http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html</a>
<b>Use of Class Notes and Materials:</b> <a href="http://policy.umn.edu/Policies/Education/Education/CLASSNOTESSTUDENTS.html">http://policy.umn.edu/Policies/Education/Education/CLASSNOTESSTUDENTS.html</a>
<b>Scholastic Dishonesty and Student Conduct Code:</b> <a href="http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.pdf">http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.pdf</a>
<b>Sexual Harassment:</b> <a href="http://www1.umn.edu/regents/policies/humanresources/SexHarassment.pdf">http://www1.umn.edu/regents/policies/humanresources/SexHarassment.pdf</a>
<b>Statement on Climate of Inclusivity:</b> 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. <i>(or refer to <a href="http://www1.umn.edu/regents/policies/administrative/Equity_Diversity_EO_AA.pdf">http://www1.umn.edu/regents/policies/administrative/Equity_Diversity_EO_AA.pdf</a>)</i>
<b>Academic Freedom and Responsibility:</b> <a href="http://www1.umn.edu/regents/policies/academic/Academic_Freedom.pdf">http://www1.umn.edu/regents/policies/academic/Academic_Freedom.pdf</a>
<b>Availability of Disability and Mental Health Services:</b> The University of Minnesota is committed to providing all students equal access to learning opportunities. Disability Services (DS) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations. <ul style="list-style-type: none"> <li>• 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 <a href="mailto:ds@umn.edu">ds@umn.edu</a>.</li> <li>• Students registered with DS, who have a letter requesting accommodations, are encouraged to contact the instructor early in the semester to discuss accommodations outlined in their letter.</li> </ul> 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 <a href="http://www.mentalhealth.umn.edu">www.mentalhealth.umn.edu</a> or contact Counseling/Consulting Services at 612-624-3323.

<b>Academic Services:</b>		
If you would like additional help, please contact one of the offices listed below.		
Center for Writing	10 Nicholson Hall, Mpls	612-626-7579
Student Academic Success Service	340 Appleby Hall, Mpls	612-624-3323
	199 Coffey Hall, St. Paul	

Course Schedule (\*Subject to change!)

Week	Mon	Weds
1/16		Course intro/history of the Space suit Project overview
1/23	Synthesizing evidence: Frameworks and requirements Project discussion and bidding Mobility <i>Reading due: FCD introduction</i>	Topic research begins: team research meetings and contracts Introduction: literature review and finding evidence, writing resource summaries Problem variable brainstorm, begin research Mobility exercise <i>Reading due: FCD Ch 2</i>
1/30	Foundation modules <i>Due: Speculative framework/outline draft</i>	Foundation modules Writing a problem definition <i>Due: resource summaries</i>
2/6	Foundation modules Sr. show debrief Team meetings: project research <i>Due: (group) research sub-topic outline, problem definition</i>	Foundation modules Using sources: avoiding plagiarism and extracting/synthesizing evidence <i>Due: resource summaries</i>
2/13	<b>Foundation modules due</b> <i>Due: (group) revised outline and framework</i>	Research reports: consultation meetings Translating evidence into design requirements <i>Due: resource summaries</i>
2/20	User research planning, materials planning <i>Benchmark: research report draft complete</i>	<b>Research report drafts due</b> Writing a research plan: identifying and testing variables, reproducibility
2/27	Research report revision Ideation/Prototyping, user research	Prototyping, testing and evaluation <b>Research plan due</b> <b>Final research report due</b>
3/6	Prototype development/evaluation planning (mentor feedback)	<i>Benchmark: First prototypes/experiments complete</i>
3/13	SPRING BREAK	SPRING BREAK
3/20	Prototype/process capture: Imaging lab <i>Benchmark: Testing complete</i>	<b>Prototype and testing presentations</b> <b>Investigation reports due</b>
3/27	<b>Prototype and testing presentations (if needed)</b> Feedback synthesis and revision <i>Final prototype designs due</i>	Final prototype patterning and construction
4/3	Final prototype patterning and construction	Final prototype patterning and construction
4/10	Final presentation planning: posters and presentations	Final prototypes/presentations
4/17	Final prototypes: testing Presentation prep: imaging lab	<b>Demo presentations: Poster/PowerPoint drafts due</b> <b>FIELD TRIP PREP – TRIP TO JSC 4/23</b>
4/24	<b>TRIP TO HOUSTON</b> <i>Final prototypes and presentations due</i>	Trip debrief and project wrap-up Final foundation modules
5/1	Final foundation modules	Course wrap-up, studio cleanup