

# SM3727: WEARABLES

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## Effective Term

Semester B 2023/24

## Part I Course Overview

### Course Title

Wearables

### Subject Code

SM - School of Creative Media

### Course Number

3727

### Academic Unit

School of Creative Media (SM)

### College/School

School of Creative Media (SM)

### Course Duration

One Semester

### Credit Units

3

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

SM2715 Creative Coding or SM2716 Physical Computing and Tangible Media or SM3611 New Media for Installation, Events and Performance

### Precursors

Nil

### Equivalent Courses

Nil

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

The course is designed to impart a deep understanding of wearable intelligent assistants, with a special emphasis on heads-up computing. Students will engage with the core principles of designing user interfaces for wearables, exploring the intricate balance between functionality, aesthetics, and user ergonomics. The curriculum will delve into the conceptualization and realization of interfaces that facilitate intuitive human-computer interactions in the realm of wearable technology, moving beyond traditional hardware-focused perspectives. The course will challenge students to think critically about the seamless integration of wearables into daily life, especially within domains such as art, fashion, communication, and healthcare.

### Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Archive comprehensive knowledge on wearables (art, research and commercial products)	x		
2	Understand the design methods of wearable interaction and artwork	x		
3	Acquire the skills of rapid prototyping for wearable interfaces and applications		x	x
4	Design/ Draft wearable prototypes or art pieces		x	x
5	Transform basic technical competence into a unique style or personal signature	x	x	x

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

#### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

### Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	In-class discussion and analysis on current wearable applications	1, 2
2	Lecture	In-class discussion and analysis on possible future application of wearable	1, 2
3	Workshop	Demonstration on techniques involved in creating a wearable prototype (Individual or/ and small group project)	2, 3, 4, 5

### Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Discussion and critiques on existing wearable applications	1, 2	20	
2	Development of interactive systems with wearable platforms	3, 4	30	
3	Create original concept, interface and prototype of a wearable device which is capable to, including but not limited to, <ul style="list-style-type: none"> <li>· enhancing everyday and on the go human experiences in areas of living, learning, playing, and working.</li> </ul>	1, 2, 3, 4, 5	50	

**Continuous Assessment (%)**

100

**Examination (%)**

0

**Assessment Rubrics (AR)****Assessment Task**

1. Discussion and critiques on existing artworks

**Criterion**

Students should demonstrate the understanding on the process of designing wearable artworks and interactive applications, appreciate the current development of wearable technologies, and critique the shortcomings.

**Excellent (A+, A, A-)**

- Work has strong affective quality and the articulation of personal styles and signature
- Excellent appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
- Work raises questions and instill insights about the process of conception, creative strategization and production
- Innovative exploration by combining knowledge from different disciplines (e.g. mathematics, psychology, physics, anthropology, etc.) to create an inter-disciplinary project
- Efficient adjustment of plans and strategies in response to resources (time, space, equipment, etc) available with constructive adjustment

**Good (B+, B, B-)**

- Strong appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
- Ability to create project/ work that demonstrate the processes of thinking and creative exploration
- Proper adjustment of plans and strategies in response to resources (time, space, equipment, etc) available and constructive feedback/ suggestions

**Fair (C+, C, C-)**

- Basic appreciation and/or application of the aesthetic and expressive qualities of the medium
- Limited ability to create project/ work that demonstrate the processes of thinking and creative exploration
- Adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

**Marginal (D)**

- Marginal appreciation of the aesthetic and expressive qualities of the medium
- Marginal ability to create project/ work that demonstrate the processes of thinking and creative exploration
- Limited adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

**Failure (F)**

- No appreciation of the aesthetics and expressive qualities of the medium
  - Fail to create project/ work that demonstrate the processes of thinking and creative exploration
  - Minimal adjustment of plans and strategies in response to resources (time, space, equipment, etc) available
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**Assessment Task**

2. Creative Project/ Technical Project/ Portfolio

**Criterion**

Students should demonstrate ability to utilize primary and secondary sources, execute creative ideas and projects. The threshold of ‘discovery’ lies in a student’ s proactively turning theory into praxis, to transform course material into self-owned authorship.

**Excellent (A+, A, A-)**

- Work has strong affective quality and the articulation of personal styles and signature
- Excellent appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
- Work raises questions and instill insights about the process of conception, creative strategization and production
- Innovative exploration by combining knowledge from different disciplines (e.g. mathematics, psychology, physics, anthropology, etc.) to create an inter-disciplinary project
- Efficient adjustment of plans and strategies in response to resources (time, space, equipment, etc) available with constructive adjustment

**Good (B+, B, B-)**

- Strong appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
- Ability to create project/ work that demonstrate the processes of thinking and creative exploration
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- Marginal appreciation of the aesthetic and expressive qualities of the medium
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**Failure (F)**

- No appreciation of the aesthetics and expressive qualities of the medium
  - Fail to create project/ work that demonstrate the processes of thinking and creative exploration
  - Minimal adjustment of plans and strategies in response to resources (time, space, equipment, etc) available
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**Additional Information for AR**

All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

## Part III Other Information

### Keyword Syllabus

Wearable intelligent assistant

Human-Computer Interaction

Ubiquitous Computing

Ergonomy

Heads-up computing

### Reading List

#### Compulsory Readings

Title	
1	Nil

#### Additional Readings

Title	
1	Nil