

W1

Design thinking process

UCD Design

UX

Usability Definition and Components (Nielsen Norman, ISO, Whitney)

W2

User classification method -> (roles/demographics/need states) (skills level/skills aspect)

Benefits of understand users

Sampling approach / **Questionnaire** / Interview / contextual inquiry

Observation and Hawthorne effect

Data type

User persona/stories

Analysis user task methods

W3

Norman's 7 Interaction design principles

6 Cognitive processes

Norman's 7 stages of action

Execution & Evaluation Gulfs

W4

GUI WIWIP

Navigation/menu types

Shneiderman's 8 Golden Rule

W5

Information Architecture (purpose/components)

Organization schemes/structures

Menu types / Menu Design guideline

Hick's Law

Icon Design Guidelines (skeuomorphism VS metaphors)

W6

Visual Design elements

5 Visual design principles (scale/visual hierarchy/ balance/contrast/gestalt)

5 gestalt principles

Von Restorff Effect

W8

UX evaluation

10 Nielsen Heuristic Evaluation and its process/stages/优缺点/severity's 3 factors

Planning usability testing

tools for testing (eyetracking/website analytics tool/ AB testing)

W9

Disability types/Exclusion

Accessible design approaches

Assistive Technologies

Accessibility Definition

WCAG Accessibility Guideline's 4 principle

WCAG techniques

W10

4 Interaction types

Shneiderman's 5 interaction styles

Interaction devices

Fitts Law

GSOM model and limitation

W11

Voice interaction and design guidelines

Voice interaction structure (invocation, response and prompt, intents)

Multimodal interface

Onboarding

Onboarding patterns

Onboarding is interaction design that eases users into the experience of using a product.

- Introduce new users to basic features
- Help users learn about features
- Give users confidence and comfort
- Establish early engagement
- Create a good first-impression

W7

W12