RESEARCH METHODOLOGY & THESIS STUDIES
INTRODUCTION

Assistant Lecturer Aya Shukri Mohammed

Portfolio Preparation & Graduation Thesis Study

First semester

Week number 1

9th Oct. 2025

Outline

- ✓ **Course Objectives**
- ✓ **Learning Outcomes**
- ✓ **Thesis Structure**
- ✓ **Weekly Schedule (Syllabus)**
- ✓ **Course Evaluation**
- ✓ **What Is Research?**
- ✓ **Difference between (Thesis, Report, Presentation)**
- ✓ **How to start research**
- ✓ **Ethics of Research**
- ✓ **Academic Writing**
- ✓ **Citation**

Course Objectives

- ✓ **Understand the relationship between research and design**
- ✓ **Formulate a clear project proposal**
- ✓ **Conduct academic research in interior design**
- ✓ **Apply appropriate research methodologies**
- ✓ **Analyze existing projects (case studies)**
- ✓ **Develop a space program**
- ✓ **Translate research findings into design guidelines**
- ✓ **Organize and present research in a professional thesis format**

Learning Outcomes

By the end of this course, students will:

- Understand **how to write and organize a thesis**.
- Be able to conduct **research in the field of interior design**.
- Learn to analyze **case studies** critically.
- Prepare **design guidelines** that will be applied in the next semester.
- Build a **strong portfolio piece**.

Thesis Structure

Chapter 1 Introduction
Chapter 2: Literature Review
Chapter 3 Methodology
Chapter 4 Case Studies
Chapter 5 User & Site Analysis
Chapter 6 Design Criteria & Guidelines
Chapter 7 Conclusion & Recommendations

Weekly Schedule (Syllabus)

Week 1 : Course Introduction + Project Topic Selection

Week 2: Chapter 1 – Introduction (Problem, Aim, Objectives, Scope, Significance)

Week 3: Chapter 2 – Literature Review (theory + Theoretical Framework)

Week 4: Chapter 3 – Methodology (research approach + case study framework + questionnaire)

Week 5–6: Chapter 4 – Case Studies & Results

Week 7: Midterm Exam (evaluation of Chapters 1–4 progress)

Week 8: Chapter 5 – Space Program, Standards & Site Analysis

Week 9: Chapter 6 – Design Criteria & Guidelines (Concept, sustainability, cultural aspects)

Week 10: Chapter 7 – Conclusion + Recommendations

Week 11: Prefinal Submission (full draft thesis)

Week 12: Presentation & Final Submission

Course Evaluation

Prelim Submission 10 %
Prefinal Submission 15 %
Final Submission 40 %
Classwork 13%
Homework 12%
Progress 5%
Day sketch 5%

What is Research?

Meaning of Research

✓ A careful study of a **subject**, especially to discover **new facts or information about it**.

Objective of research

✓ The purpose of research is to discover **answers to questions** through the application of scientific procedures.

✓ The main aim of research is to **find out the truth that is hidden and which has not been discovered yet.**

What is the difference between (Thesis, Report, Presentation)

Aspect	Thesis	Report	Presentation
Purpose	In-depth academic research	Summarizes findings/analysis	Communicate key points visually & verbally
Length	Long (50–300+ pages)	Medium (5–50 pages)	Short (5–20 minutes)
Content	Full research: intro, literature, methods, results, discussion	Structured but concise: summary, methods, results, recommendations	Highlights only main ideas, visuals, charts
Audience	Academic examiners, supervisors	Academic/professional readers	Academic/professional audience
Focus	Original contribution to knowledge	Practical results & recommendations	Clear, engaging delivery

How to start research?

1. Understand What a Thesis Is

✓ A thesis is not just a project; it is a **research-based design study**.

✓ It combines **theory + research + design application**.

✓ The goal is to solve a **real design problem** with academic justification.

How to start research?

2. Choose a Research Area

Start by thinking about **fields of interest**:

Healthcare design (hospitals, maternity, clinics)

Educational spaces (schools, universities, libraries)

Cultural & heritage (museums, heritage centers)

Commercial design (malls, offices, hotels, restaurants)

Residential design (housing, smart homes, sustainable living)

How to start research?

3. Choose a Research Area

Identify a Problem

Every thesis should answer a **design problem or gap**, for example:

- How can hospital interiors improve patient healing?

- How can interior design preserve local identity in modern spaces?

How to start research?

4. Identify Keywords:

✓ Your search will be based on the keywords you choose.

✓ Keywords describe the main concepts you are looking for.

✓ Write lots of keywords

✓ Find alternatives for the same word (synonyms).

✓ Try www.thesaurus.com to find alternative words

Use useful resources

Useful Resources (for Museum *Interior Design*)

These directly support design, spatial planning, and user experience.

Books/Journals on *exhibition design* and *display techniques*

Case studies of successful museum interiors (art museums, science museums, heritage museums)

Research papers about *lighting design in galleries*

Articles on *visitor experience* and how interior spaces affect it

Not Useful Resources (outside Interior Design focus)

These may be important for museums in general, but **they do not aid in interior design research**.

Museum **management strategies** (staffing, budgeting, administration)

Security systems (CCTV, guards, alarms)

Ticketing and marketing methods

Historical research about collections (artifacts themselves, not how they're displayed)

Curatorial theory (how experts select art, not how it's exhibited spatially)

Legal or policy documents about ownership of artifacts

Key word example

Main Keyword

Museum

Synonyms
- Gallery
- Exhibition hall
- Cultural center
- Heritage center
- Art house

Broader Terms
- Public buildings
- Cultural architecture
- Educational spaces

Related Concepts
- Interior design of museums
- Exhibition design
- Visitor experience
- Spatial organization
- Display techniques
- Lighting in museums
- Museum circulation

Narrower Terms
- Children's Museum
- Science museum
- History museum
- Art museum

Resources

✓ Books
✓ Google Books
✓ PDF
✓ Academic articles and textbook
✓ Google Scholar
✓ Official website, or any trusted website

Ethics of Research

✓ **Research Ethics**

Research must be conducted with **honesty**. Students are expected to respect intellectual property, give proper credit to authors, and present original work.

✓ **Plagiarism**

Plagiarism means **copying someone else's words, ideas, or designs without proper citation**. It is a serious academic violation and will not be accepted.

Ethics of Research

✓ **Paraphrasing**

Paraphrasing means **rewriting information in your own words while keeping the original meaning**. Even when paraphrasing, you must give credit to the source.

✓ **About AI**

AI tools can be used for **support** (such as checking grammar or generating ideas), but **they cannot replace your own research, analysis, and design thinking**. Over-dependence on AI leads to weak and non-original work.

20 %

Academic Writing

- ✓ Academic writing is a **formal style** of writing that is mainly used in colleges, universities, and scholarly sources.

Characteristics of academic writing

- ✓ Formal in style
- ✓ Structured/organized
- ✓ Researched using scholarly sources to support points. Unbiased language
- ✓ Focused language
- ✓ Correct grammar, punctuation, tenses
- ✓ Discipline-specific terms

Academic Writing (Correct Style):

Natural light plays a critical role in interior design by enhancing spatial perception, improving occupant well-being, and reducing energy consumption. Studies have demonstrated that well-distributed daylight can positively influence mood, productivity, and visual comfort (Smith, 2022). Consequently, architects and interior designers prioritize window orientation, glazing types, and interior layouts to optimize natural lighting within residential and commercial environments.

Normal Writing (Casual/Incorrect Style):

In my opinion, natural light is super important in a room because it makes the space feel bigger and nicer. I think it also saves energy. I've read somewhere that daylight can make people feel happier and work better. So, designers usually try to put windows in good spots and arrange furniture nicely to get the best sunlight.

Things to Avoid in Academic Writing

✓ **Personal opinions**
"I think…", "In my opinion…"
✓ **Unclear references**
"Some people say…", "I read somewhere…"
✓ **Conversational language**
"Super important", "Really nice"
✓ **First-person pronouns**
"I did…", "We think…"
✓ **Unsupported claims**
statements without evidence
✓ **Emotional or subjective words**
"Amazing", "Terrible"
✓ **Contractions**
"Don't", "Can't"
✓ **Slang**
"A piece of cake"

References

✓ References are the list of sources you used in your thesis. They indicate the source of your information and help prevent plagiarism.

Reference Style

APA (American Psychological Association)

✓ In-text citation

✓ Reference list

Reference Style

APA (American Psychological Association)

✓ **In-text citation**

Example: Interior design affects how people feel and behave in a space. Good design combines function and beauty to improve comfort and well-being **(Poldma, 2016).**

✓ **Reference list**
Poldma, T. (2016). *Meanings of designed spaces.* **Fairchild Books.**

Poldma, T. (2016). *Meanings of designed spaces*. Fairchild Books.

Author   Date   Title   Source

Author: Who is responsible for this work?

Date: When was this work published?

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The Effect of Intertextuality on the Semantic Level of Architectural Form

Title

Document Type : Original Article

Authors

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doi 10.24271/PS[...]

Date

Abstract

All creative fields, but especially architecture, are affected by intertextuality. To know how the notion of "intertextuality" affects the semantic sense of form in architecture, this study initially examines how it applies to literacy and then architecture. The objective is to determine how intertextuality affects architecture and how it could transmit a form's senses. The problem with intertextuality as an approach is that it doesn't provide designers with a clear path to follow. As a consequence, based on the idea of intertextuality in literacy, six steps are found from the theoretical framework to be steps of the intertextuality process in architecture. Case studies and a questionnaire are used for applying these steps. The study's results show that intertextuality has a significant impact and that each step of the intertextuality process intensely shows that the form's meaning might be changed from semantic to syntactic by the architect by including an intertextual idea in its design.
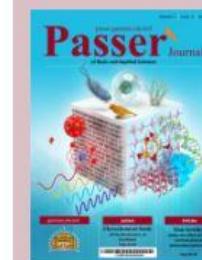
Files

XML

PDF   660.93 K

Reference Style

APA (American Psychological Association)

✓ **In-text citation**

(Mohammed, Ismael, & Khalil, 2024)

✓ **Reference list**

Mohammed, A. Shukri, Ismael, Z. Khairi, & Khalil, K. Fathel. (2024). *The effect of intertextuality on the semantic level of architectural form. Passer Journal of Basic and Applied Sciences, 6* (Special Issue), 224–241. https://doi.org/10.24271/psr.2024.188561

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Figures and Tables Citation

Figures (such as **diagrams, floor plans, furniture layouts, or renderings**) play a crucial role in illustrating design ideas, concepts, or research findings. Each figure should be **numbered sequentially** according to the chapter **(e.g., Figure 1.1, Figure 2.3).**

Key points:
- ✓ Mention the figure in the text: **"As shown in Figure 2.1**…"
- ✓ Place the figure **as close as possible** to where it is mentioned.
- ✓ Provide a caption under the figure with a **description** and a **source citation** if applicable.

Figures and Tables Citation

In interior design, lighting significantly affects both aesthetics and functionality. **As shown in Figure 3.2,** the layout of pendant lights creates a balanced visual flow while enhancing natural light distribution throughout the space.

Figure 3.2
- ✓ **Means Figure 2 in Chapter 3**

Figures and Tables Citation

Figure 3.2 – Pendant light arrangement in the living area (Smith, 2022)

Figures and Tables Citation

The process of mentioning tables in a thesis is **similar to figures**: you refer to them in the text (e.g., **"As shown in Table 2.1**…") and provide a numbered title.
The difference is:

The table title goes above the table.
Source citation goes below the table (if not original).

Example in the Text
As shown in Table 2.1, bamboo panels have a lower environmental impact than hardwood materials.

Table 2.1 – Comparison of Environmental Impact of Interior Materials

Material	Carbon Footprint (kg CO_2/m²)	Cost ($/m²)
Bamboo Panels	15	20
Hardwood	40	35

Source: Smith, 2022

Do you have any questions?