

Daily Induction Plan (DIP) Guidelines and Reference

DIP Template Structure

Header Information

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# Daily Induction Plan

**Lecturer:** Muhammad Aiman Syahmi Bin Haris
**Subject:** CP115 & SC015
**Week:** [Week Number]
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Course Learning Outcomes (CLOs)

Standard CLOs for CP115:

- **CLO1:** Explain basic computer programming concepts
- **CLO2:** Solve simple problems using algorithms and a programming language
- **CLO3:** Demonstrate programming skills in solving simple problems

Standard CLOs for SC015:

- **CLO3:** Create basic multimedia and database project

Class Schedules and CLO Usage

C01 Class Schedule:

- **Tuesday:** Lab 1 (11:15 AM - 1:15 PM) + Tutorial 1 (7:15 AM - 8:15 AM)
- **Wednesday:** Tutorial 2 (7:15 AM - 8:15 AM)
- **Thursday:** Lecture 2 (7:15 AM - 8:15 AM)

C02 Class Schedule:

- **Monday:** Lab 1 (11:15 AM - 1:15 PM)
- **Tuesday:** Tutorial 1 (2:15 PM - 3:15 PM)
- **Thursday:** Tutorial 2 (10:15 AM - 11:15 AM)

Combined Lectures (Both Classes):

- **Wednesday:** Lecture 1 (8:15 AM - 9:15 AM) - C01 & C02 together
- **Thursday:** Lecture 2 (7:15 AM - 8:15 AM) - C01 & C02 together

SC015 Class Schedule:

- **F11:** Wednesday (11:15 AM - 1:15 PM) - Lab
- **F04:** Friday (10:15 AM - 12:15 PM) - Lab

CLO Usage Guidelines:

Subject	Class Type	CLO to Use	Notes
CP115	PRAKTIKUM (Labs)	CLO2 or CLO3	Always practical application
CP115	LECTURE	CLO1	Always conceptual understanding
CP115	TUTORIAL	CLO1, CLO2, or both	Depends on content mix

SC015	PRAKTIKUM (Labs)	CLO3	Always CLO3 for multimedia/database projects
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Table Structure

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| # | Day/Time | Class | Subject | Mode | Topic | Learning Outcome | CLO |
Reflection |
| ---|-----|-----|-----|-----|-----|-----|-----|-----|
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Space-Saving Guidelines

- **Combined Lectures:** Lectures are shared between C01 and C02 classes, so combine them into single entries in the DIP table to save space
- **Example:** Instead of separate rows for C01 Lecture 1 and C02 Lecture 1, use one row with "C01 & C02" in the Class column

Content Sources

Refer to these documents for content:

1. **Course Schedule:** docs/course/schedule.md - Main course content and topics
2. **C01 Schedule:** docs/course/c01-schedule.csv - C01 class dates
3. **C02 Schedule:** docs/course/class-schedule.csv - C02 class dates

Signature Section Format

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**Prepared By:**

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Muhammad Aiman Syahmi Bin Haris

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**Verified By:**

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Zulkarnaen Bin Saridi
Head of Computer Science Unit
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Weekly Content Mapping

Content Format Guidelines

- **Subject Column:** CP115 or SC015

- **Topics Column:** Only put topic names (e.g., "Topic 1: Introduction to Programming", "Topic 4: Multimedia", "Topic 5: Database")
- **Learning Outcome Column:** Copy exact text from schedule.md for CP115 or use SC015 specific learning outcomes
- **Reflection Column:** Must be suitable and relevant to the specific topic and learning outcome being taught

SC015 Content by Week Period

Week 1-9: Topic 4 - Multimedia

- Learning Outcomes:
 - (a) Identify five (5) multimedia elements (text, animation, graphic, audio, video)
 - (b) Produce multimedia project
- **Reflections:** Must focus on multimedia concepts only - element identification, project creation, technical challenges with multimedia integration

Week 10 onwards: Topic 5 - Database

- Learning Outcomes:
 - (a) Identify basic concepts of database
 - (b) Create a simple relational database project
- **Reflections:** Focus on database concepts - table relationships, normalization, query development

Special Weeks (No SC015 Classes):

- **Week 8 & 9:** Lab Test 1 - Show "Lab Test 1" in Topic and Learning Outcome columns, leave reflections empty
- **Week 15:** Lab Test 2 - Show "Lab Test 2" in Topic and Learning Outcome columns, leave reflections empty

Week 1 Content Mapping

From schedule.md Week 1:

- **Lecture:** Course briefing + Topic 1: Introduction to Programming - (a) Identify programming concepts
- **Tutorial:** Course briefing
- **Praktikum:** Course briefing

Week 2 Content Mapping

From schedule.md Week 2:

- **Lecture:** Topic 1: Introduction to Programming - (b) List five (5) steps in problem solving + Topic 2: Problem Analysis - (a) Define the Input-Process-Output (IPO) model
- **Tutorial:** Topic 1: Introduction to Programming - (c) Explain five (5) steps in problem solving
- **Praktikum:** Topic 1: Introduction to Programming - (d) Demonstrate use of design software and coding platforms

(Continue mapping based on schedule.md)

Reflection Writing Guidelines

Topic-Specific Reflections:

Reflections must be relevant to the specific topic and learning outcome. Match reflection content to what students are actually learning.

Tone and Variety:

- Mix positive and realistic reflections
- Include some challenges students face
- Use generic, professional language
- Make reflections specific to the topic and learning outcome

Examples by Topic/Learning Outcome:

Course Briefing:

- **Good:** "Students understand the course structure, assessment methods, and expectations clearly"
- **Realistic:** "Some students need clarification on assessment weightages and submission procedures"
- **Mixed:** "Most students grasp the course overview, though some require additional explanation of practical requirements"

Topic 1 - (a) Identify programming concepts:

- **Good:** "Students can identify basic programming concepts and terminology effectively"
- **Realistic:** "Students have difficulty distinguishing between different programming paradigms initially"
- **Mixed:** "Most students understand fundamental concepts, though some struggle with abstract programming terminology"

Topic 1 - (c) Explain five (5) steps in problem solving:

- **Good:** "Students can systematically apply the five problem-solving steps to given scenarios"
- **Realistic:** "Students find it challenging to break down complex problems into manageable steps"
- **Mixed:** "Most students understand the problem-solving methodology, though some need practice applying it consistently"

Topic 1 - (d) Demonstrate use of design software and coding platforms:

- **Good:** "Students successfully navigate and utilize programming environments and design tools"
- **Realistic:** "Students experience initial difficulties with software installation and interface navigation"
- **Mixed:** "Most students adapt to the programming tools well, though some need additional support with advanced features"

Topic 4 - (d) Construct Python programs based on components:

- **Good:** "Students can construct basic Python programs using proper components and syntax structure"
- **Realistic:** "Students have difficulty remembering all Python syntax rules and proper indentation initially"
- **Mixed:** "Most students understand Python components well, though some need practice with data type conversions"

Topic 5 - (d) Apply the IPO model, pseudocode and flowchart (sequence):

- **Good:** "Students successfully apply the IPO model and can create effective sequential flowcharts for problem-solving"
- **Realistic:** "Students struggle with translating complex problems into clear sequential flowchart format"
- **Mixed:** "Most students understand sequential logic, though some struggle with translating problems into flowchart format"

Topic 6 - (c) Identify relational and logical operators in selection structures:

- **Good:** "Students can explain the concepts of selection structures and apply logical operators in different programming scenarios"
- **Realistic:** "Students can identify relational operators but find logical operators challenging to distinguish initially"
- **Mixed:** "Most students understand basic selection concepts, though some struggle with complex logical combinations"

SC015 Topic 4 - (a) Identify multimedia elements (Weeks 1-9):

- **Good:** "Students successfully identify all five multimedia elements and understand their applications"
- **Realistic:** "Students can identify multimedia elements but need practice distinguishing between animation types"
- **Mixed:** "Most students understand multimedia concepts, though some struggle with technical terminology"

SC015 Topic 4 - (b) Produce multimedia project (Weeks 1-9):

- **Good:** "Students demonstrate creativity and technical skills in multimedia project development"
- **Realistic:** "Students find it challenging to integrate multiple multimedia elements cohesively"
- **Mixed:** "Most students can create basic multimedia projects, though some need guidance with advanced features"

SC015 Topic 5 - (a) Identify basic concepts of database (Week 10 onwards):

- **Good:** "Students can explain database fundamentals and relational concepts effectively"
- **Realistic:** "Students struggle with understanding relationships between database tables initially"
- **Mixed:** "Most students grasp basic database concepts, though some need additional practice with normalization"

SC015 Topic 5 - (b) Create simple relational database project (Week 10 onwards):

- **Good:** "Students successfully design and implement functional database projects with proper relationships"
- **Realistic:** "Students experience difficulties with database design and relationship implementation"
- **Mixed:** "Most students can create basic databases, though some struggle with complex queries and relationships"

File Naming Convention

- `week-[number]-dip.md`
- Example: `week-1-dip.md` , `week-2-dip.md`

Navigation Integration

Update `.vitepress/config.mjs` to add new DIP weeks:

```
{
  text: 'Daily Induction Plans',
  items: [
    { text: 'Week 1 DIP', link: '/course/DIP/week-1-dip' },
    { text: 'Week 2 DIP', link: '/course/DIP/week-2-dip' },
    // Add more weeks as needed
  ]
}
```