COURSE SYLLABUS

# HLT210 • Health Data Interoperability

School of Health & Human Sciences • Undergraduate • 6 ECTS

Overview

Understand health-data interoperability in practice: core concepts, standards, and workflow realities. Students work with structured clinical data examples while emphasizing privacy, data ethics, and how systems exchange information safely across organizations.

## LOGISTICS

Credits: 6 ECTS
Level: Undergraduate
School: School of Health & Human Sciences
Prerequisites: None listed
Tags: health, interoperability, data-ethics
Meeting time: Weekly lecture + standards workshop
Instruction mode: Standards + practice: map real workflows to interoperable data

## LEARNING OUTCOMES

You will be able to:
- Explain interoperability concepts and why systems fail in practice
- Model clinical workflows and data flows with clear boundaries
- Apply data ethics principles in clinical data handling
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## ASSESSMENT

Components
- Coursework: 60%
- Final project: 40%

Assessment focuses on accurate modeling and clear documentation. Assignments include a
workflow map, a standards-based data model, and an ethics note describing risks and
mitigations.

## WEEKLY PLAN

Schedule
Week 1: Week 1
- Interoperability basics: terminology and failure modes
Week 2: Week 2
- Standards overview: identifiers, vocabularies, messaging
Week 3: Week 3
- Workflow mapping: where data enters and leaves systems
Week 4: Week 4
- Data quality and governance: validation and audit trails

Extended outline
- Interoperability basics: terminology and failure modes
- Standards overview: identifiers, vocabularies, messaging
- Workflow mapping: where data enters and leaves systems
- Data quality and governance: validation and audit trails
- Ethics: minimization, consent, and risk tiers
- Final: a small interoperability proposal + documentation

## POLICIES & RESOURCES

- Privacy: do not use real patient data.
- Auditability: documentation must support review.
- Academic integrity: cite standards and references used.

Suggested resources
- Workflow mapping template
- Data governance checklist (quality, access, retention)
- Ethics note template (risk, mitigation, boundaries)