

## HT24 5HI001 - "Computer Applications in Health Care and Biomedicine" course

### Schedule of the course – 27 June 2024

**When:** the course starts on **Monday 2nd December 2024** and runs until **Sunday 19<sup>th</sup> January 2025**.

**Where:** Solna Campus. Rooms: Karolina, Wangari. Study visits might be at the hosts' venues.

**Notice 1:** The schedule presents course activities, including mandatory activities (i.e., activities that require compulsory attendance). Please save the dates and times for the planned sessions and the mandatory activities (dates and times are presented for Central European Time – CET time zone, i.e., Stockholm time). Topics for class activities are consolidated. Sessions with guest lectures are preliminary and should be confirmed (yellow background color). Deadlines and mandatory activities (including assignments and re-examinations) are consolidated. This schedule does not include the time you need for studying lectures, literature, or other learning materials. Lectures can be in person, in the class, online as Zoom meetings (only in special cases), alternatively provided as recorded videos.

**Notice 2:** Please make sure that you have a personal computer/ laptop available for practicing, as software tools running on personal computers/ laptops will be used in the course.

**Notice 3:** Composition of the Groups for the mandatory group assignment on Public Health Informatics will be done by the teacher; however, groups can be proposed by students. Different ways of student grouping within the course will be discussed in the first session.

Week	#	Date	Time	Activities	Lecturer	Room
49	1	Monday 2nd December 2024	10:00-12:00	<b>Mandatory activity 1:</b> Roll call + 0.1 Introduction to the course; 0.2 Description of the group activity for Public Health Informatics (PHI), mandatory group assignment	SB	Karolina
			13:00-14:00	1.2 Introduction to modelling health care processes. Recap on UML Activity diagrams		
			14:00-16:00	<b>Mandatory activity 2:</b> Group activity on "Healthcare professionals' information needs". Groups work on modelling with Unified Modelling Language (UML) Activity Diagrams.		
	2	Tuesday 3rd December 2024	10:00-12:00	4.1 - What is Public Health? Introduction to Public Health and Public Health Informatics	SB	Karolina
			13:00-16:00	1.3 From patient data to medical knowledge. + 1.4 Introduction to Object Oriented Modelling. Recap on UML Class Diagrams.		
	3	Wednesday 4th December 2024	10:00-12:00	1.5 Introduction to Medical Terminologies and Biomedical Ontologies"- Basic concepts	SB	Karolina
			13:00-16:00	1.5 Introduction to Medical Terminologies and Biomedical Ontologies" – ICD-9/10/11; SNOMED CT; FASS/LOINC		
	4	Thursday 5th December 2024	10:00-12:00	Health Informationn system + 2.1 The Electronic Medical Record (EMR) - Part 1	SB	Karolina
			13:00-16:00	2.1 The Electronic Medical Record (EMR) – a UML representation – Part 2		
	5	Friday 6th December 2024	10:00-12:00	2.2 - Introduction to Clinical Decision Support (CDS)	SB	Karolina
			13:00-16:00	<b>Mandatory activity 3:</b> Group activity on "Healthcare professionals' information needs". Groups present their models to the class. Class discussion.		
50	1	Monday 9th December 2024	10:00-12:00	1.7 Introduction to Standards in Health Informatics	SB	Karolina
			13:00-16:00	<b>Mandatory activity 4:</b> Group activity on Conceptual Data Modelling in Health Care context. Groups works on modelling with Unified Modelling Language Class diagrams.		
	2	Tuesday 10th December 2024	10:00-12:00	1.6 "Semantic interoperability in Health Care and Social Care", from the Socialstyrelsen - National Board of Health and Welfare. (Option 1)	Guests from Socialstyrelsen	Karolina
			14:00-16:00	2.5 - Study visit at Cambio CDS – (Drottninggatan 89, Stockholm) (Option 1)		At Cambio
			10:00-12:00	2.3 Modelling of clinical practice guidelines – Part 1	SB	
	3	Wednesday 11th December 2024	13:00-15:00	1.9 - Standardisation: why and how. Part 1 - Context, fundamental problems, strategies, and examples of solutions for Electronic Health Records	ES	Karolina
			10:00-12:00	1.6 "Semantic interoperability in Health Care and Social Care", from the Socialstyrelsen - National Board of Health and Welfare. (Option 2)	Guests from Socialstyrelsen	Karolina
	4	Thursday 12th December 2024	14:00-16:00	2.5 - Study visit at Cambio CDS – (Drottninggatan 89, Stockholm) (Option 2)		At Cambio
				No class activity (St. Lucia)		

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	5	Friday 13th December 2024	@16:00:00	Publication of Individual Assignment 1 - Common tools for Health Informatics (G) + Clinical Informatics Part (CI).		Online
	6					
	7					
Week	#	Date	Time	Activities	Lecturer	Room
51	1	Monday 16th December 2024	10:00-12:00	2.3 Modelling of clinical practice guidelines – Part 2	SB	Karolina
			13:00-16:00	<b>Mandatory activity 5:</b> Group activity on Conceptual Data Modelling in Health Care context. Groups presents their models to the class. Class discussion.		
	2	Tuesday 17th December 2024	10:00-12:00	<b>Mandatory activity 6 (1/2):</b> Group activity on Modelling Clinical practice guidelines, by IF-THEN rules. Groups work on modelling Clinical practice guidelines.	SB	Karolina
			13:00-16:00	<b>Mandatory activity 6 (2/2):</b> Group activity on Modelling Clinical practice guidelines, by IF-THEN rules. Groups work on modelling Clinical practice guidelines.		
	3	Wednesday 18th December 2024	10:00-12:00	<b>Mandatory activity 7:</b> Group activity on Modelling Clinical practice guidelines, by IF-THEN rules. Groups presents their models to the class. Class discussion.	SB	Karolina
			13:00-15:00	1.9 - Standardisation: why and how. Part 2 - Tool & system demonstrations, examples, Q&A	ES	
	4	Thursday 19th December 2024	10:00 - 12:00	Q/A session on Individual Assignment 1 - Common tools for Health Informatics (G) + Clinical Informatics Part (CI).	SB	Online
			13:00 - 15:00	3.2 - Mobile Health Apps and frameworks for their assessment		
			15:00-17:00	1.8 SNOMED CT Analytics - Workshop by guests from SNOMED International (snomed.org) (Online)	Guests from Snomed.org	Online
	5	Friday 20th December 2024		No class activity		
	6					
	7					
Week	#	Date	Time	Activities	Lecturer	Room
52	1	Monday 23th December 2024		No class activity		
	2	Tuesday 24th December 2024		No class activity		
	3	Wednesday 25th December 2024		Holiday		
	4	Thursday 26th December 2024		Holiday		
	5	Friday 27th December 2024		No class activity		
	6					
	7					
Week	#	Date	Time	Activities	Lecturer	Room
1	1	Monday 30th December 2024		No class activity		
	2	Tuesday 31th December 2024		No class activity		
	3	Wednesday 1st January 2025		Holiday		
	4	Thursday 2nd January 2025		No class activity		
	5	Friday 3rd January 2025	@16:00:00	Publication of Individual Assignment 2 - Consumer Health Informatics (CHI); No class activity		Online
			@23:59:00	<b>Mandatory activity 8:</b> Online Submission Deadline of Individual Assignment 1 - Common tools for Health Informatics (G) + Clinical Informatics Part (CI).		Online
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	7					
Week	#	Date	Time	Activities	Lecturer	Room
2	1	Monday 6th January 2025		Holiday		
	2	Tuesday 7th January 2025		No class activity		
	3	Wednesday 8th January 2025	10:00-11:00	Quality registries in Sweden	JH	Wangari
			11:00-12:00, 13:00-15:00	<b>Mandatory activity 9:</b> Groups works on their projects on Public Health Informatics (and inform about title and stage).	SB	
	4	Thursday 9th January 2025	10:00-12:00	1.10 - Ethical, Legal and Social issues + Health Informatics Ethics – Class activity on Ethical Dilemma	SB	Wangari
			13:00-15:00	Q/A session on Individual Assignment 2 - Consumer Health Informatics (CHI)		

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	5	Friday 10th January 2025	@23:59:00	Online Late Submission of Individual Assignment 1 - Common tools for Health Informatics (G) + Clinical Informatics Part (CI); No class activity		Online
	6					
	7					
Week	#	Date	Time	Activities	Lecturer	Room
3	1	Monday 13th January 2025	15:00-17:00	2.4 Introduction to Telemedicine + Class Discussion (Online)	GD	Online
	2	Tuesday 14th January 2025	14:00-16:00	4.2 Informatics for Population Health	LAM	Online
	3	Wednesday 15th January 2025	@08:59:00	<b>Mandatory activity 10:</b> Online Submission Deadline of Mandatory Group Assignment on PHI:		Online
			10:00-12:00	<b>Mandatory activity 11:</b> Seminar - Group activity presentations and feedback - Session 1.	SB	Wangari
			13:00-16:00	<b>Mandatory activity 12:</b> Seminar – Group activity presentations and feedback - Session 2.		
	4	Thursday 16th January 2025		No class activity		
	5	Friday 17th January 2025		No class activity		
	6					
	7	Sunday 19th January 2025	@23:59:00	<b>Mandatory activity 13:</b> Online Submission Deadline of Individual Assignment 2 - Consumer Health Informatics (CHI)		Online
Week	#	Date	Time	Activities	Lecturer	Room
4	1	Monday 20th January 2025	@00:15:00	Online Late Submission of Individual Assignment 2 - Consumer Health Informatics (CHI)		Online

**Re-examinations of Individual Assignments 1 and 2**

**=1=** Re-Examination in April 2025 - HT24 5HI001 - "Computer Applications in Health Care and Biomedicine" course. It will be opened on 14 April 2025, 16:00:00 Stockholm time. Then, deadline (due date) is 30 April 2025, 23:59:00 Stockholm time. Finally, availability date (late submission) is 7 May 2025, 23:59:00 Stockholm time.

**=2=** Re-Examination in August 2025 - HT24 5HI001 - "Computer Applications in Health Care and Biomedicine" course. It will be opened on 23 July 2025, at 16:00:00 Stockholm time. Then, deadline (due date) is 6 August 2025, at 23:59:00 Stockholm time. Finally, availability date (late submission) is 13 August 2025, at 23:59:00 Stockholm time.