

## HT23 5HI001 - "Computer Applications in Health Care and Biomedicine" course

### Schedule of the course – 13 November 2023

**When:** the course starts on **Monday 27<sup>th</sup> November 2023** and runs until **Sunday 14<sup>th</sup> January 2024**.

**Where:** In Solna Campus. Room: WRET Lind. 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 consolidated, though one of them needs to be confirmed (yellow background). 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
48	1	Monday 27th November 2023	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	Wretlind
			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 28th November 2023	10:00-12:00	1.3 From patient data to medical knowledge.	SB	Wretlind
			13:00-16:00	1.4 Introduction to Object Oriented Modelling. Recap on UML Class Diagrams.		
	3	Wednesday 29th November 2023	10:00-12:00	1.5 Introduction to Medical Terminologies and Biomedical Ontologies"- Basic concepts	SB	Wretlind
			13:00-15:00	1.5 Introduction to Medical Terminologies and Biomedical Ontologies" – ICD-9/10/11; SNOMED CT; FASS/LOINC		
	4	Thursday 30th November 2023	10:00-12:00	2.1 The Electronic Medical Record (EMR) - Part 1	SB	Wretlind
			13:00-15:00	2.1 The Electronic Medical Record (EMR) – a UML representation (1/2) – Part 2		
	5	Friday 1st December 2023	10:00-12:00	2.1 The Electronic Medical Record (EMR) – a UML representation (2/2) – Part 3	SB	Wretlind
			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.		
49	1	Monday 04th December 2023	10:00-12:00	2.2 - Introduction to Clinical Decision Support (CDS)	SB	Wretlind
			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 05th December 2023	10:00-12:00	1.6 "Semantic interoperability in Health Care and Social Care", from the Socialstyrelsen - National Board of Health and Welfare.	Guests from Socialstyrelsen	Wretlind
			13:00-15:00	1.7 Introduction to Standards in Health Informatics	SK	
	3	Wednesday 06th December 2023	10:00-12:00	3.2 - Mobile Health Apps and frameworks for their assessment	SB + CB	Wretlind
			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	
	4	Thursday 7th December 2023	10:00-12:00	2.3 Modelling of clinical practice guidelines – Part 1	SB	Wretlind
				Afternoon: no class activity, so you might attend the “Nobel Lecture” in Aula Medica.		
	5	Friday 8th December 2023	10:00-12:00	<b>Mandatory activity 5:</b> Group activity on Conceptual Data Modelling in Health Care context. Groups presents their models to the class. Class discussion.	SB	Wretlind
			13:00-15:00	2.3 Modelling of clinical practice guidelines – Part 2		
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Week	#	Date	Time	Activities	Lecturer	Room
50	1	Monday 11th December 2023	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	Wretlind
			13:00-15:00	<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.		
	2	Tuesday 12th December 2023	10:00-12:00	4.1 - What is Public Health? Introduction to Public Health and Public Health Informatics	SB	Wretlind
			14:00-16:00	2.5 - Study visit at Cambio CDS – (Drottninggatan 89, Stockholm)		At Cambio
	3	Wednesday 13th December 2023		No class activity (St. Lucia)		
			@16:00:00	Publication of Individual Assignment 1 - Common tools for Health Informatics (G) + Clinical Informatics Part (CI).		Online
	4	Thursday 14th December 2023	10:00-12:00	1.9 - Standardisation: why and how. Part 2 - Tool & system demonstrations, examples, Q&A	ES	Wretlind Online
			15:00-17:00	1.8 SNOMED CT Analytics - Workshop by guests from SNOMED International (snomed.org) (Online) (Option 2)	Guests from Snomed.org	Wretlind Online
	5	Friday 15th December 2023	10:00-12:00	Q/A session on Individual Assignment 1 - Common tools for Health Informatics (G) + Clinical Informatics Part (CI).	SB	Wretlind
			13:00-16:00	<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	
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Week	#	Date	Time	Activities	Lecturer	Room
51	1	Monday 18th December 2023	10:00-11:00	Quality registries in Sweden	JH	Wretlind
			11:00-12:00, 13:00-15:00	Group activity on Mandatory Group assignment	SB	
	2	Tuesday 19th December 2023		No class activity		
	3	Wednesday 20th December 2023		No class activity		
	4	Thursday 21st December 2023		No class activity		
	5	Friday 22nd December 2023		No class activity		
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Week	#	Date	Time	Activities	Lecturer	Room
52	1	Monday 25th December 2023		Holiday		
	2	Tuesday 26th December 2023		Holiday		
	3	Wednesday 27th December 2023		No class activity		
	4	Thursday 28th December 2023		No class activity		
	5	Friday 29th December 2023	@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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Week	#	Date	Time	Activities	Lecturer	Room
1	1	Monday 1st January 2024		Holiday		
	2	Tuesday 2nd January 2024		No class activity		
	3	Wednesday 3rd January 2024		No class activity		
	4	Thursday 4th January 2024		No class activity		
	5	Friday 5th January 2024	@23:59:00	Online Late Submission of Individual Assignment 1 - Common tools for Health Informatics (G) + Clinical Informatics Part (CI); No class activity		Online
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Week	#	Date	Time	Activities	Lecturer	Room
2	1	Monday 8th January 2024	10:00-12:00	Q/A session on Individual Assignment 2 - Consumer Health Informatics (CHI)	SB	Wretlind
			13:00-15:00	<b>Mandatory activity 9:</b> Groups inform about title and stage of their projects on Public Health Informatics.	SB	
			15:00-17:00	2.4 Introduction to Telemedicine + Class Discussion (Online)	GD	Wretlind Online
	2	Tuesday 9th January 2024	10:00-12:00	1.10 - Ethical, Legal and Social issues + Health Informatics Ethics – Class activity on Ethical Dilemma	SB	Wretlind
			14:00-16:00	From the US Centers for Disease Control and Prevention (CDC) - Projects on Public Health Informatics (Online) (Option 1)	Guests from CDC	Wretlind Online
	3	Wednesday 10th January 2024	10:00-12:00	Group activity on Mandatory Group assignment	SB	Wretlind
			14:00-16:00	From the US Centers for Disease Control and Prevention (CDC) - Projects on Public Health Informatics (Online) (Option 2)	Guests from CDC	Wretlind Online
	4	Thursday 11th January 2024	@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	Wretlind
			13:00-15:00	<b>Mandatory activity 12:</b> Seminar – Group activity presentations and feedback - Session 2.		
	5	Friday 12th January 2024		No class activity		
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	7	Sunday 14th January 2024	@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
3	1	Monday 15th January 2024	@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 2024 - HT23 5HI001 - "Computer Applications in Health Care and Biomedicine" course. It will be opened on 10 April 2024, 16:00:00 Stockholm time. Then, deadline (due date) is 24 April 2024, 23:59:00 Stockholm time. Finally, availability date (late submission) is 30 April 2024, 23:59:00 Stockholm time.

**=2=** Re-Examination in August 2024 - HT23 5HI001 - "Computer Applications in Health Care and Biomedicine" course. It will be opened on 30 July 2024, at 16:00:00 Stockholm time. Then, deadline (due date) is 13 August 2024, at 23:59:00 Stockholm time. Finally, availability date (late submission) is 20 August 2024, at 23:59:00 Stockholm time.