Semantic Web

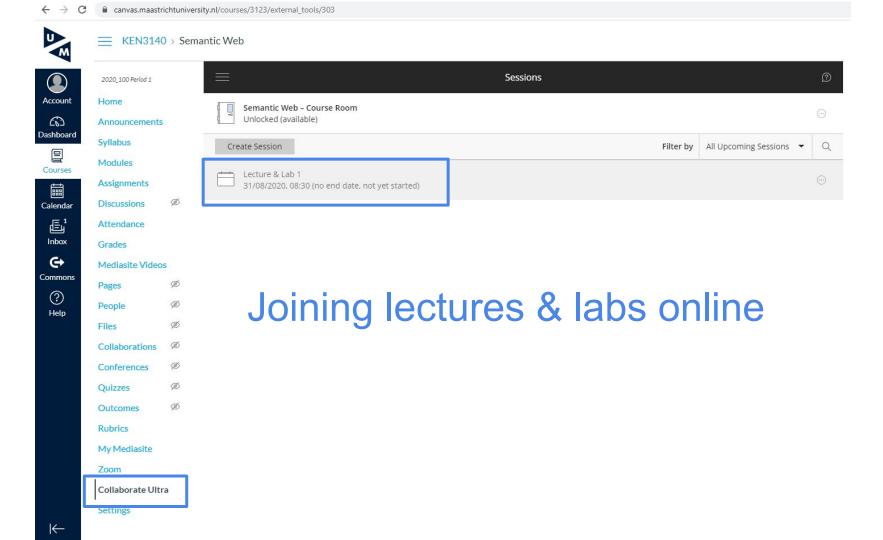
KEN3140

Lab 1: Installing and running Jupyter Notebooks, IJava and Python

Kody Moodley, Vincent Emonet



A word on Canvas





KEN3140 > Syllabus

Ø

Ø

\$

Ø

Ø

Ø

Ø



(6)

Home Announcements

2020_100 Period 1

Assignments

Discussions

Mediasite Videos

Collaborations

Conferences

Quizzes

Outcomes

Pages

People

Files

Dashboard

Modules Courses

Courses



Attendance

dox Grades





Course syllabus

Course Description & Learning Objectives 2

Course Schedule

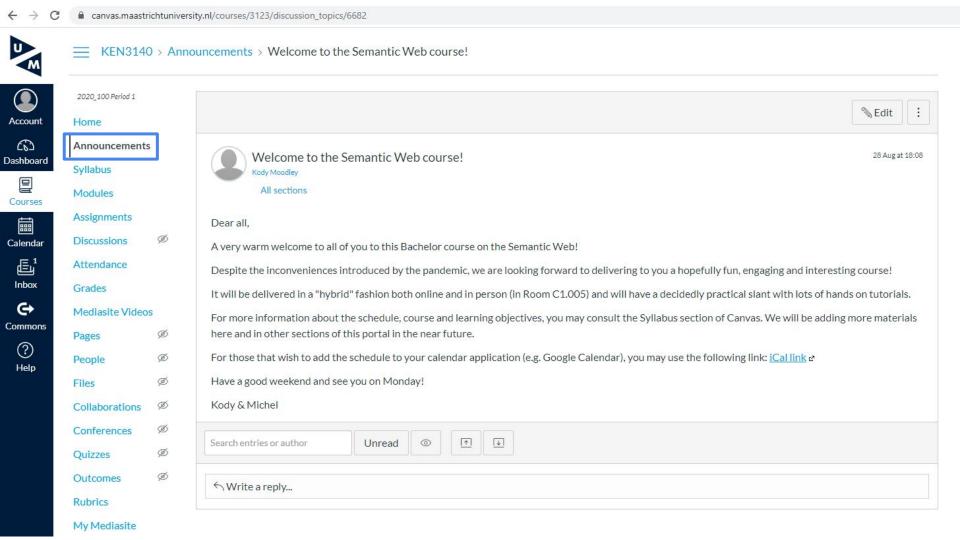
Minimise file preview

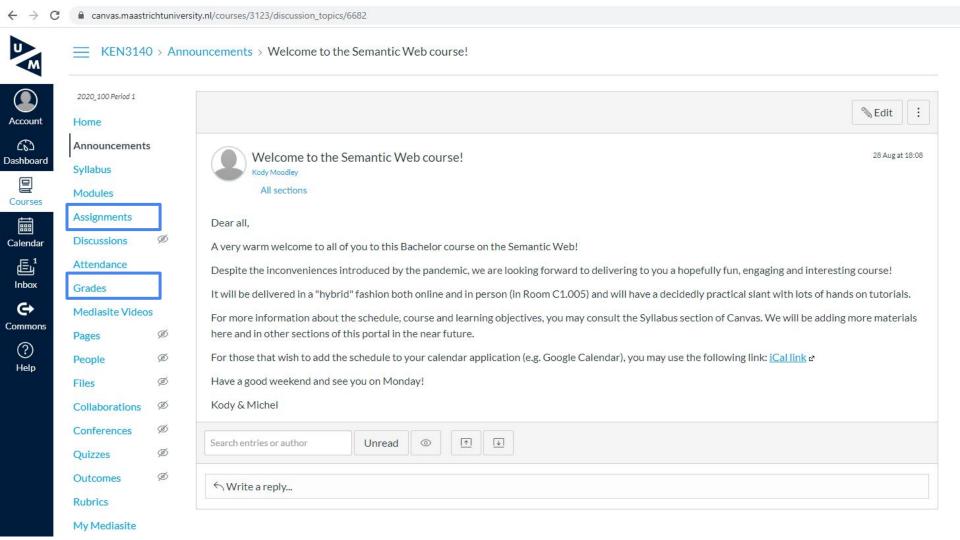
Week	Date	Timeslot	Content	Topics	Room	
t .	31/08/2020	Mon, 08:30 - 05:30	Lecture 1: Introduction	Course organisation Evaluations The World Wide Web The Semantic Web Ontologies Some application areas	Online	
	31/08/2021	Mon, 09:30 - 10:30	Lab 1: Introduction to Jupyter Notebooks	Setup Jupyter notebook & IJava	Online	
	3/9/2020	Thu, 08:30 - 09:30	Lecture 2: introduction to RDF	Resource Description Framework Data types Relification RDF representations Turtle syntax of RDF statements N-Triples Turtle XML JSON-LD	C1.005/Online	
	3/9/2020	Thu, 05:30 - 10:30	Lab 2: RDF Syntax; Introduction to Assignment 1	Importing RDF data, creating RDF graphs, add edges and nodes etc.	C1.005/Online	
2	7/9/2020	Mon, 11:00 - 12:00	Lecture 3: RDF Schema & Semantics	RDF Schema Semantics for RDF and RDFS Inference rules Schema.org	C1.005/Online	
	7/9/2020	Mon, 12:00 - 13:00	Lab 3: RDF Reasoning	RDFS reasoning in practice using Python / Java libraries in Jupyter	C1.005/Online	
	10/9/2020	Thu, 08:30 - 10:30	Open Lab: Assignment 1 - RDF syntax and semantics	Creating an RDF graph, assessing its quality and using RDFS reasoning to infer new statements.	C1.005/Online	
	14/09/2020	Mon, 11:00 - 12:00	Lecture 4: Introduction to SPARQL	Querying RDF graphs with SPARQL, SPARQL syntax and language constructs	C1.005/Online	
	14/09/2020	Mon, 12:00 - 13:00	Lab 4: Introduction to SPARQL; Assignment 2	Querying RDF graphs with SPARQL, SPARQL syntax and language constructs	C1.005/Online	

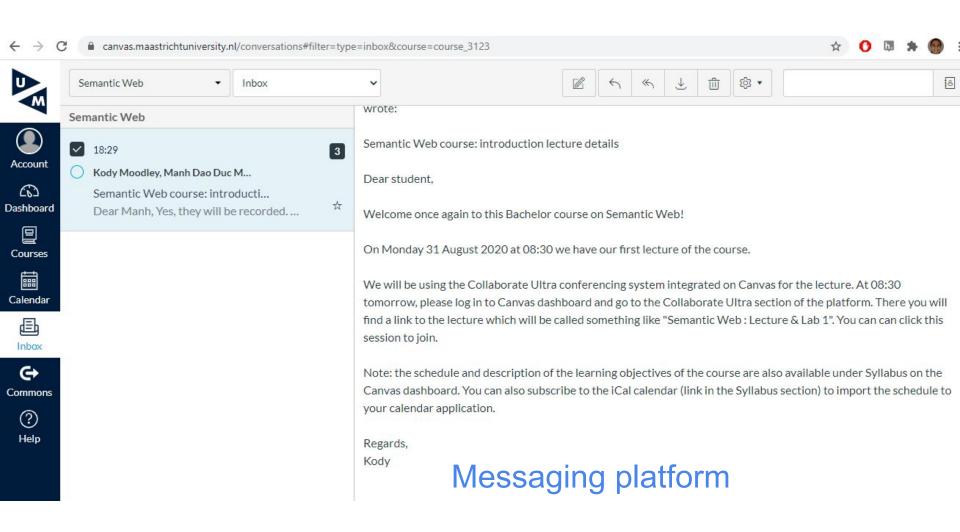
<	August 2020						
27	28	29	30	31	1	2	
3	4	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28	29	30	
31	1	2	3	4	5	6	

Jump to today & Edit

Course assignments are not weighted.







Back to today's Lab

Learning objectives

- How to install and run <u>Jupyter</u> notebooks
- How to install <u>IJava</u> kernel for Jupyter
- Basics of how to use Jupyter notebooks
- These tools will be required to complete the Lab and Assignment tasks you will receive throughout the course

Some polls to begin

Background knowledge:

- Have you taken a previous course on Java?
- Do you know how to code in <u>Python</u>?
- Have you used <u>Jupyter</u> notebooks before?
- Have you used <u>Docker</u> before?

Some polls to begin

Technical setup:

- Are you using Windows, Linux or Mac?
- Do you have neither Docker, <u>Anaconda</u>, nor JupyterLab installed?
 - None of these? Do the whole guide on Slide 13 from scratch
- Do you have Docker installed and running?
 - Yes? Skip to Option 1, Step 3 in the guide on Slide 13
- Do you have JupyterLab already installed?
 - With Anaconda? Do Option 2 in the guide on Slide 13, Steps 2 5 (skip Step 3)
 - Without Anaconda? Preferably follow the guide from scratch (contact Andreea)
- Do you have Anaconda installed?
 - With JupyterLab? Do Option 2 in the guide on Slide 13, Steps 2 5 (skip Step 3)
 - Without JupyterLab? Do Option 2 in the guide on Slide 13, Steps 2 5

Tutorial

I will create three breakout groups on Blackboard Collaborate:

Windows (Andreea), Mac (Remzi), Linux (Vincent)

Please join the group with others using your operating system. An instructor will be assigned to each breakout group to coordinate that discussion. You will post questions and comments related to this lab in that breakout group.

Tutorial

Here is a link to the guide for this lab: https://tinyurl.com/y6jusnbr

Please follow the guide exactly! If you don't, it will be much harder to assist you with getting up and running.

- If you run out of time in this session, please continue in your own time
- Please complete the installation before the next Lab / Lecture
- If you have any issues outside of this session, contact an instructor via email
 - Windows: Andreea Grigriou (<u>a.grigoriu@maastrichtuniversity.nl</u>)
 - Mac: Remzi Celebi (<u>remzi.celebi@maastrichtuniversity.nl</u>)
 - Linux: Vincent Emonet (<u>vincent.emonet@maastrichtuniversity.nl</u>)
 - General issues: Kody Moodley (<u>kody.moodley@maastrichtuniversity.nl</u>)

End poll

How many were able to successfully run both Java and Python code examples in the Usage section of the guide?