Bijlage 8: Track Information Science (Overzichten toetsing per vak / leeruitkomsten per vak)

De meeste vakken hanteren wekelijkse of tussentijdse opdrachten waarvoor er in principe geen herkansingen zijn, omdat deze opdrachten bedoeld zijn als formatieve toetsing. Als opdrachten meetellen in het eindcijfer is er in overleg met de docent een mogelijkheid tot herkansing.

Semester 1		Block 1			Block 2		
Module	Code	Classes	Examination	Resit	Classes	Examination	Resit
Research Seminar Information Science	LIX018M05		Literature review	Literature review		Master Thesis Proposal	Master Thesis Proposal
Shared Task Information Science	LIX026M05		Assignments	Assignments		Final Project Report	Final Project Report
Semantic Web Technology	LIX002M05	Weekly assignments	Final project	Final project			
Learning from Data	LIX016M05	Weekly assignments	Final project	Final project			

Semester 1		Block 2			Block 3		
Module	Code	Classes	Examination	Resit	Classes	Examination	Resit
Computational Semantics	LIX021M05	Weekly assignments	Final Project				Final Project
Computer-Mediated Communication	LIX022M05		Written Exam and Research Report	Research Report			Written Exam

Semester 2		Block 3			Block 4		
Module	Code	Classes	Examination	Resit	Classes	Examination	Resit
User Interface Evaluation	LIX024M05	Assignments	Final Report	Final Report			
Natural Language Processing	LIX001M05	Weekly assignments	Written Exam				Written Exam
Language Technology Project	LIX025M05					Research paper presentation, the project presentation, the project report and participation.	Research paper presentation, the project presentation, the project report and participation.
Conversational Interfaces: Practice	LCX070M05					(1) the group report; (2) your individual addendum; and (3) the developed system.	(1) the group report; (2) your individual addendum; and (3) the developed system.
Ma-scriptie Informatiekunde	LCX998M20		(The student works the whole semester			Master Thesis	Master Thesis (If thesis grade

			on his/her thesis)				is not sufficient)
Ma-stage Informatiekunde	LCX900M10		The student does an internship during the whole semester			Internship report	Internship report

semester I			
Vakcode	**Vaknaam**	**Beoogde leeruitkomsten**	**Wijze van toetsen**
LIX018M05	Research Seminar Information Science	Upon successful completion of the course unit, students are able to read critically advanced scientific papers, and sustain discussions about them (2.1,2.2,3.1,3.2,3.3). They are up to date with recent developments in NLP and CL (1.1,1.2), which are fast moving fields, and are able to prepare a detailed and critical literature review on a topic of interest (2.1,2.2,2.4,2.5,5.1,5.2). They understand how research is done by researchers in the field, both interacting with RuG staff as well as international guests. They are able to prepare a master thesis proposal and present it (2.1,2.2,2.4,2.5,3.1,3.2,3.3), thus including dealing with a QA session about their proposed research work (4.1, 4.2).	• A literature review • A master thesis proposal, and its presentation in the seminar
LIX026M05	Shared Task Information Science	Upon successful completion of the course unit, students are able to 1. Work in a team to solve a concrete computational problem in information science (1.1, 1.3, 4.1) 2. Translate the theoretical knowledge acquired to a practical implementation (2.1, 2.2,.3) 3. Develop novel approaches and compare to the state-of-the-art (3.2) (2.4, 3.2,5.2) 4. Learn to work independently with minimal supervision from the teacher (2.5, 3.3) 5. Learn to write a scientific paper (and meets the required standards) (5.1)	Assignments, Final Project report. There will be 3 graded assignments in the first block (1a). All assignments must obtain a sufficient grade (5,5 or higher). No compensation is allowed. The Final Project report needs to follow the guidelines of the shared task itself, it should be written in English, and in the style of an academic article.

LIX002M05	Semantic Web Technology	Leerdoelen van het studieonderdeel (eindtermen op moduleniveau) 1. Ability to work with semantic web languages and tools (processing RDF, querying RDF using SPARQL, RDF and OWL ontology development using Protégé). [1.1, 2.1, 2.2] 2. Ability to integrate these skills with general programming skills in the implementation of a demonstrator that uses semantic web technology. [1.2,1.3, 2,3, 2.4, 2.5, 3.2, 4.1] 3. Critical understanding of the motivation and concepts underlying the development of the semantic web. [1.2] 4. Familiarity with influential data sources, in particular DBpedia. [1.1]	Weighting: all weekly assignments are weighted 10%. The final grade is the average of the weekly assignments (30%) and the project grade (70%).
LIX016M05	Learning from Data	The course has a strong focus on practice, so that students are expected to be able to practically run machine learning experiments on a given (NLP) problem. They will master key concepts and terminology of machine learning, understand training and testing procedures, and use existing tools that support machine learning experiments - more specifically, they will become accustomed to using existing libraries and software, and preparing data for it. [1.1, 2.1, 2.2] In setting up an experiment for a given task, they will be able to decide how to represent a problem, choose and implement features for learning and an appropriate algorithm, and interpret the results critically, by understanding evaluation metrics as well as possible sources of errors (overfitting, little data, etc). [2.5, 3.3] They will also know how to appropriately report on the experiments they run, as it is done in academic publications. [4.1]	The final assessment is based on weekly assignments given to the students throughout the course and on a final project.
LIX021M05	Computational Semantics	The student who masters the theory and techniques given in this course will be in a good position to appreciate and critically assess ongoing developments in computational semantics and semantic annotation (1.1). After the course the student is able to give a formal semantic analysis of a	You get a grade for the five assignments, and a grade for the group project.

		fragment of natural language (1.2) and also provide a compositional semantics of a (simple) sentence using the lambda calculus (2.1). The student has a good understanding of all these techniques from computational semantics and lexical resources to apply them in a practical application (3.1), and a critical awareness of the possibilities and limitations of first-order logic applied to concrete language understanding problems (5.1, 5.2).	
LIX022M05	Computer-Mediated Communication	Upon successful completion of the course unit, students are able to (related to the Dublin Descriptors 1.2 – 1.3, 2.1 – 2.5, 3.1, 4.1, 5.2): (i) Describe the main concepts introduced in the course: • Knowledge sharing • Enterprise social media • Social network analysis • Social network visualization • Computer-mediated communication • Computer-mediated communication competence (ii) Explain the relations between the main concepts introduced; (iii) Recognize and identify the affordances and barriers of computer-mediated communication systems in general for knowledge sharing, and in particular those of enterprise social media; (iv) Illustrate the process of online knowledge sharing by giving concrete examples; (vi) Analyze online knowledge sharing by using social network analysis and visualization; (vii) Evaluate the communicative effectiveness of online knowledge sharing;	- Final research assignment (in groups of 2 students) (50%); grades are assigned to research content (60%), research report (20%), research oral presentation (20%) - Final individual written exam (50%)

		(viii) Propose strategies to optimize online knowledge sharing, from a computer-mediated communication view.	

semester II			
Vakcode	**Vaknaam**	**Beoogde leeruitkomsten**	**Wijze van toetsen**
LIX999M20	Ma-scriptie Informatiekunde	Afhankelijk van het onderwerp en gebruikte methode van de scriptie. Zie voor de beoordelingscriteria het beoordelingsformulier.	Master-scriptie
LIX000M10	Ma-stage Informatiekunde	Afhankelijk van het onderwerp en gebruikte methode van de stage. Zie voor de beoordelingscriteria de formulieren die het stagebureau hanteert.	Een stageonderzoek bij een organisatie.
LIX001M05	Natural Language Processing	The goal of the course is to ensure that students are familiar with a number of very fundamental techniques and algorithms in the area of natural language processing, in particular for regular expressions, statistical language models based on N-grams, neural language models, part-of-speech tagging and dependency parsing. [1.1, 1.2, 1.3, 3.1, 5.1, 5.2]	Students are assessed based on the portfolio and an exam.
LIX024M05	User Interface Evaluation	1. Explain what Usability Engineering is, understand and articulate which phases are involved in this kind of engineering process to ensure that usable software is produced that meet user requirements, identify different methods, techniques and strategies to use in this process, and understand the relationship between the different tasks that belong to the usability engineering lifecycle model (Knowledge and Insight) [1.1, 1.2, 1.3] 2. Apply knowledge and insights to a Case Study, provided by someone from the ICT workfield. Each year the problem statement can be different. (Application of knowledge and Insight) [2.1, 2.2, 2.3, 2.4, 2.5] 3. Reflect on design and design process by processing feedback from	The final course grade is predominantly based on the final report. [...] Knowledge and insight are assessed in the substantiations in assignments and in the final report. The designs proposed for the problem statement introduced in this course demonstrate how well students apply knowledge, insight, and process feedback. Overall critical thinking is assessed throughout the design process, in

		experts in the workfield, and substantiate choices and decisions made during the design process (Judgment) [2.2] 4. Present their design and its substantiation orally, visually, and textually to experts in the workfield, and usability specialists (Communication) [4.1] 5. Adequately use knowledge, insights, and skills obtained to similar design problems in various fields (Learning Skills) [2.3]	particular in the substantiations of choices to be made, and decisions to be taken. Various forms of communication (esp. poster and final report) are assessed with respect to coherence and consistency of content, clarity, comprehensibility, accuracy, adequacy, and completeness for academic and practical purposes.
LCX070M05	Conversational Interfaces: Practice	Upon successful completion of the course unit, students are able to (where the numbers in brackets refer to the Dublin descriptors cited in the Learning Outcomes of the Master Programme Communication and Information Studies): • Implement empirical methods for data collection involving Wizard of Oz and human subjects (2.1; 2.3); • Conduct a task-based evaluation of a particular dialogue strategy (cf. Turing test) (2.1; 2.2; 2.5); • Present their own research via oral and written reports (4.1; 4.2).	The final grade of this course will be based on three deliverables: (1) the group report; (2) your individual addendum; and (3) the developed system. Each of this component will be graded on the scale of 1 to 10. The final grade is the average of these three grades.
LIX025M05	Language Technology Project	Upon successful completion of the course unit, students are able to: 1. Understand recent developments in the field of Natural Language Processing, mainly those related to the application of neural networks to this field (IS 1.1). 2. Apply the knowledge acquired to solve well delimited practical exercises in the field of Natural Language Processing (IS 2.2).	Students are assessed based on the research paper presentation, the project presentation, the project report and participation.

| | | 3. Tackle an open challenge in Natural Language Processing (IS 5.1).

4. Communicate to peers the results of research conducted by the student him/herself (course project) and by others (research papers) (IS 4.1).

5. Assess critically their own research (course project) and research conducted by others (research papers) (IS 3.2). | |