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

Most courses include weekly assignments for which a resit is not possible as they are formative. If they do contribute to the final grade, the instructor will make a plan for a resit if necessary.

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			
Speech Science	[TBD]	Assignments	Final report	Final report			

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		Research Report, Oral	Written Exam			Written Exam

			Presentation, Written Exam				
Semester 2		Block 3			Block 4		
Module	Code	Classes	Examination	Resit	Classes	Examination	Resit
User Interface Evaluation	LIX024M05	(Individual and group) Assignments: Perusall = 10% (of the final marks) Assignment 1 = 15% (of the final marks) Assignment 2 = 15% (of the final marks) Assignment 3 = 30% (of the final marks) Assignment 4 = 30 % (of the final marks)					
Advanced Topics in Natural Language Processing	LIX001M05	Weekly assignments	Final Report				Written Exam
Investigating Language Variation …	LIX…M05	Weekly assignments (4, pass/fail)	Final Report	Final Report			
Language Technology Project	LIX025M05					Research paper presentation, the project presentation, the project	Research paper presentation, the project presentation, the project

						report and participation.	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.
Msc Thesis Information Science	LCX998M20		(The student works the whole semester on his/her thesis)			Master Thesis	Master Thesis (If thesis grade is not sufficient)
Internship Information Science	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, 2.2,2.3) 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 (i) Describe the main concepts introduced in the course: • Knowledge sharing • Enterprise social media • Computer-mediated communication • Computer-mediated communication competence (1.1, 1.2, 2.1, 2.2) (ii) Explain the relations between the main concepts introduced; (1.1, 1.2, 3.1) (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; (1.1, 2.1, 2.2, 4.2) (iv) Illustrate the process of online knowledge sharing by giving concrete examples (1.2, 2.1, 2.2, 5.1) (v) Evaluate the communicative effectiveness of online knowledge sharing; (1.2, 2.1, 2.2, 4.2, 5.1) (vi) Propose strategies to optimize online knowledge sharing, from a computer-mediated communication view. (1.1, 2.1, 2.2, 3.4, 4.2, 5.1)	Research report (in student groups, 20%); final oral presentation (in student groups, 40%), final individual written exam (40%)
LIX027M05	Speech Science	Upon successful completion of the course unit, students are able to: 1. Identify components of an acoustic speech signal and describe their relation to	Four lab assignments (each graded 0-2 points) and a final assignment. Average lab

		physiological/anatomical components of the speech system. (Learning outcomes: 1.1 and 1.2). 2. Independently design appropriate methods for speech data collection and analyses for typical and pathological speech. Specifically, students will be able to determine which speech measures are best suited for a specific research question. (Learning outcomes: 1.1, 1.2, 2.1, 2.2) 3. Reflect on the validity and reliability of both data collection and analyses for speech research (Learning outcome: 3.1, 5.1) 4. Evaluate a case study in speech research(Learning outcome: 3.2, 4.1)	assignment corresponds to 40% of the grade, the final assignment (graded 0-10) corresponds to 60% of the grade. A resit is possible for each assignment.
semester II			
Vakcode	**Vaknaam**	**Beoogde leeruitkomsten**	**Wijze van toetsen**
LIX999M20	Msc Thesis Information Science	Varies with topic and methods used. See the assessment form for the criteria used to grade the thesis.	Thesis
LIX000M10	Internship Information Science	Varies with topic, assigned tasks, and methods used. Assessment is based report and evaluation of the external supervisor after consultation with the internal supervisor.	Internship report and evaluation by external supervisor.
LIX001M05	Advanced Topics in NLP	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 Final Report
LIX024M05	User Interface Evaluation	1. Understand the various aspects of UIE including cognitive psychology, human-computer interaction (HCI), and usability engineering (1.1, 1.2, 1.3, 4.1)	Students in this course will be assessed based on five assignments. Three of these

		2. Identify the needs of users (of user-interface) and how they are served by UI (1.1, 1.2, 2.3) 3. Critically analyze UIs by considering both the human and the usability engineering factors (1.1, 2.1, 2.2, 2.5) 4. analyze human-computer interaction from both theoretical and practical perspective and to come up with well-founded and target-group or task-oriented solutions (1.3, 2.2, 2.4, 2.5) 5. apply design principles to guide the evaluation of any user interface (2.3, 2.4, 2.5)	assignments are individual assignments (Perusall, Assignment 1 and 2) and group assignments (Assignment 3 and 4). For the group assignments, students have to form pairs. To pass the course, students must obtain a final passing grade (5.5 or higher), as well as a passing grade for each of the assignments: the individual assignments and the group assignments. The final grade is calculated as the weighted average of all the assignments including the Perusall. For the group project, students' roles must be specified following the instructions given in class and each student may receive a slightly different mark for the group project, based on their individual contribution.
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):	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

		• 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 scale of 1 to 10. The final grade is the average of these three grades.
LIX … M05	Investigating Language Variation and Change Quantitatively	Upon successful completion of the course unit, students are able to: 1. Understand various techniques in dialectometry (see 2.) in such a way that they can be applied. Specifically, the student knows how to use the Levenshtein distance algorithm, how to use clustering techniques, as well as multidimensional scaling (ReMA LO 1.1, 1.2; CIS-IS LO: 1.1, 2.1; assessed via lab reports and final report) 2. Independently apply various dialectometric techniques (see 2.) to existing language variation corpus data (ReMA LO 1.1, 1.2; CIS-IS LO: 2.2; assessed via lab reports and final report) 3. Reflect on the validity and reliability of the conclusions that can be drawn from the outcome of a dialectometric analysis (ReMA LO 3.1; CIS-IS LO: 3.2; assessed via final report) 4. Independently select and conduct an appropriate dialectometric analysis (which may also be a technique not discussed during the course) using an existing dialect data set and report on this adequately in writing. (ReMA LO 2.1, 4.3; CIS-IS LO: 2.2, 4.2 assessed via final report)	Formative assessment of the ability to apply dialectometric techniques will be conducted by evaluating the four regular lab reports (graded as pass/fail). The final (summative) assessment of the course will be based on a written report in which the student shows that they are able to independently select and apply appropriate dialectometric techniques to a language variation dataset and critically report on this.

LIX025M05	Language Technology Project	1. Understand various techniques in dialectometry (see 2.) in such a way that they can be applied. Specifically, the student knows how to use the Levenshtein distance algorithm, how to use clustering techniques, as well as multidimensional scaling (ReMA LO 1.1, 1.2; CIS-IS LO: 1.1, 2.1; assessed via lab reports and final report) 2. Independently apply various dialectometric techniques (see 2.) to existing language variation corpus data (ReMA LO 1.1, 1.2; CIS-IS LO: 2.2; assessed via lab reports and final report) 3. Reflect on the validity and reliability of the conclusions that can be drawn from the outcome of a dialectometric analysis (ReMA LO 3.1; CIS-IS LO: 3.2; assessed via final report) 4. Independently select and conduct an appropriate dialectometric analysis (which may also be a technique not discussed during the course) using an existing dialect data set and report on this adequately in writing. (ReMA LO 2.1, 4.3; CIS-IS LO: 2.2, 4.2 assessed via final report)	Students are assessed based on the research paper presentation, the project presentation, the project report and participation.