„Basics of the Digital Competences„ course program

Course code: IFI6206.DT	**Basics of the Digital Competences**		
Course volume ECP 3	Contact hours: 56	Teaching semester: Spring	Examination
Course aims:	A purpose of this subject is to provide the students with advanced knowledge and competence for more successful activity in contemporary environment, which is significantly based on computer technologies. To contribute to the formation of skills for working with typical office software, different digital resource.		
Brief description of course content	Working in a Windows environment. File system and operations. Working in a network environment. Text processing, methods of creating long and short documents. Design of printed text. Inserting different objects into text: pictures, logos, tables, charts, mathematical formulas. Inserting table of contents and page numbers. Headers and footers. Spreadsheets. Basics of formulas. Sorting data, reports. Charts. Graphic presentations. Creating slides, adding visual effects. Working with Internet. Searching information. File transportation. User's safety. Cloud computing, calendars etc. tools for collaboration. Basics of computer graphics (both vector and bitmap). Basic photo editing. Creation of simple vector drawings. Basics of digital audio and video. Basic audio and video editing. Description of independent work: Independent work consists solving practical tasks using office software and social software.		
Learning outcomes	Be able to design and format (borders, headers / footers, text styles, table of contents, references, tables, lists) large documents using appropriate options of word processing software; Can use a spreadsheet program to design and create tables, that includes formulas with simple functions, create data tables and process data, visualize data through charts; Be able to create presentations, following the recommended procedures and using the software options; Be able to use modern social software applications for collaboration;		
Ways of assessment:	Exam. To pass classification test, the student must solve the task (tasks) issued by the teacher for every topic of the discipline. The test must be passed at the last practical study (2 x 45 minutes). The general mark of the test depends on the sum of accumulated points for each of the parts of the test.		
Teacher:	Andrus Rinde		
Subject title in Estonian:	Digipädevuste baaskursus		
Study literature:	• MS online training materials: http://office.microsoft.com/en-us/training-FX101782702.aspx • Tutorials for OpenOffice: http://www.tutorialsforopenoffice.org/ • Support for Google Docs: http://docs.google.com/support/		

	• Lecture notes
Replacement literature:	Replacement literature is not available, to pass this course student must participate in classes
Requirements to access to exam:	To access to exam student must: 1. attend to classes (maximum number of absences is three); 2. submit all homework for deadline (on satisfactory level – at least 60% completed). In accordance with the feedback, unsatisfactory homework must be improved and re-submitted for new deadline agreed with lecturer.
Requirements for homework:	Homework's will cover all major topics (text processing, spreadsheets, presentations, computer graphics, audio and video editing). Homework descriptions and deadlines are available in Google Docs shared folder (created and shared specially for members of this study group): https://drive.google.com/drive/folders/0B1ZtsSCdtRcANS1taDVsblNqelk?usp=sharing
Evaluation criteria:	Each higher level includes all the lower levels. **Word Processing** 1. Typing and basic formatting A - Uses tab for simple table-like structures. Can use symbols not found on keyboard. B - Copies text from internet pages with no formatting. Knows important keyboard shortcuts. C - Can find relevant text information from different internet sources. D - Can select parts of text (words, sentences, paragraphs etc.) and to apply desired formatting. E - Can type correctly. Can copy whole text or parts of text to other documents. Can edit text. 2. Formatting text A - Can copy styles between documents. Can create document templates. B - Can modify existing and create new custom styles. C - Can use styles. Can use headers and footers. D - Can add borders, shading etc. to text. Can use multiple columns for text. Can create bulleted and numbered lists. E - Can change size, alignment and other character and paragraph formatting options of selected text. 3. Objects, tables and references. A - Can add captions to objects and use cross-references. B - Can add drawings and diagrams. Is able to create mathematical equations. C - Can format tables and text in table. Is able to change table layout. D - Can create and format regular tables. Can edit graphic objects (size, crop, wrapping etc.). E - Can add illustrations to text from different sources. 4. Creating document with desired outline A - Can use document sections (different formatting, headers and footers etc.). B - Can add lists of different objects (table of contents, table of figures). Can use different formats of table of contents.

C - Can change the documents outline, add and update the table of contents.

D - Can divide document into sections, add and remove section and page breaks.

E - Creates documents so that it is possible to change outline and generate table of contents.

5. Track changes

A - Can compare two documents and find differences.

B - Can filter changes by type (format, addition etc.) and author.

C - Can use different views of changed document – original, final.

D - Can activate/deactivate change tracking, accept or reject changes.

E - Knows about track changes features.

Presentations

1. Creation and presentation of slides

A - Can create presentation from text document outline.

B - Can use different presentation tools.

C - Can add different objects to slides.

D - Can use different views of presentation software. Knows and uses principles of presentations.

E - Can create new presentation using different standard slide layouts.

2. Presentation formatting

A - Can create custom designs and to apply it.

B - Can use appropriate animations.

C - Uses master slide to format the presentation.

D - Can modify existing designs.

E - Can use existing designs.

Spreadsheets

1. Common knowledge

A - Finds the solution how to convert textual data into numbers.

B - Can edit formulas with one function as argument of other.

C - Can edit formulas containing functions.

D - Can use and edit numerical and textual data.

E - Recognizes the type of data in table cells. Can edit spreadsheet (copy values, autofill etc.).

2. Table formatting

A - Can define custom number formats.

B - Can use existing number formats.

C - Can use different formatting options.

D - Can use most common number formats (available on toolbar).

E - Can use fonts, colors, borders etc. to format table.

3. Formulas

A - Can use rounding properly. Understands the syntax of functions and can edit formulas.

B - Can use logical functions. Uses one function as argument of other function.

C - Can use functions with multiple arguments. Uses naming of cells.

D - Can use most common functions (Sum;Average;Min;Max Count). Uses relative and absolute addresses.

E - Knows and uses different arithmetical operations.

4. Charts

A - Can create appropriate charts to illustrate numerical data.

	B - Can use large amount of data to create the chart.
	C - Can add appropriate data to chart, add, remove and edit this data later. Can change the type of chart.
	D - Can create simple charts.
	E - Can create chart but it doesn't illustrate data appropriately.
	5. Data tables
	A - Can use database functions, subtotals and filters.
	B - Can add fields to pivot table and create chart from pivot table.
	C - Can create pivot tables.
	D - Can sort and filter data in table.
	E - Can create tables according to principles of data table, understands the ideas of fields and records in data table.
	Computer graphics
	A - Can combine elements from different image files. Can create diagrams and drawings using vector graphics.
	B - Can perform retouching on images.
	C - Can adjust colors and set white balance.
	D - Can crop images and adjust image size.
	E - Knows most important image parameters. Can save images into different file formats.
	Digital Audio
	A - Knows digital audio parameters. Can create and combine audio clips and export them in suitable format.
	B - Can reduce noise in audio recording.
	C - Can mix audio clips using multitrack editor.
	D - Knows important audio effects and is able to apply them to audio clips.
	E - Knows basics of digital audio recording and most common file formats for digital audio. Can record audio, delete parts of recording.
	Digital Video
	A - Knows different video compression formats. Can combine visual material from different sources and export video in formats suitable for given purpose.
	B - Can create titles for video and use suitable transitions for video clips.
	C - Knows important video effects and is able to apply them to video. Can add audio to video.
	D - Knows different video standards (SD, HD). Can combine video clips into logical sequence.
	E - Knows basics of digital video and most common file formats for digital video. Can delete parts of video.
Topics, times of contact hours	Topics by weeks or lectures.
week 1 – February 1, 8:15 – 11:45	Introduction to course. Basic knowledge about computer hardware, overview. File system, important file operations, file sizes (units etc). Word processing. Rules of typing. Short vs long document. Selecting text. Basic formatting. Styles, use and modification. Navigation in document. Generating Table of Contents.

week 2 – February 8, 8:15 – 11:45	Word processing. Generating and updating the table of contents. Creation and modification of styles. Text formatting options (font, paragraph etc.). Copying text from different sources without formatting. Bibliography citations.
week 3 – February 15, 8:15 – 11:45	Word processing. Search and replace. Adding pictures to document. Adding captions to pictures and other objects. Cross-references. Text outline. Page layout. Sections. Header and footer, page numbers.
week 4 – February 22, 8:15 – 11:45	Word processing. Using different headers and footers. Tracking changes, comments. Tables in document. Drawings and diagrams. Spellcheck Printing.
week 5 – March 1, 8:15 – 11:45	Basic photo editing.
week 6 – March 8, 8:15 – 11:45	Presentations. Creating new presentation. Correction of presentation, changing outline, resetting slides, changing slide layout. Different views. Slide background. Using master slide.
week 7 – March 15, 8:15 – 11:45	Presentations. Using master slide. Transitions and animations, background graphics. Creating new master slide. Adding graphics, sound and video to slides. Hyperlinks and interactivity. Rehearsing for presentation. Printing presentation.
	WEEK FOR INDIVIDUAL WORK.
week 8 – March 29, 8:15 – 11:45	Basic audio editing.
week 9 – April 5, 8:15 – 11:45	Basic video editing.
week 10 – April 12, 8:15 – 11:45	Spreadsheets. Introduction. Inserting data to spreadsheets. Data types. Copying and moving cell content. Principles of creating formulas. Arithmetical operations, cell addresses. Using functions. Naming cells.
week 11 – April 19, 8:15 – 11:45	Spreadsheets. Advanced formulas, function as argument of other function. Using multiple sheets. Types of charts. Principles of creating charts. Editing and formatting charts.
week 12 – April 26, 8:15 – 11:45	Spreadsheets. Sorting data. Filters. Pivot tables. Formatting and printing spreadsheets. Adding chart to text document or presentation. Revising exercises.
week 13 – May 3 8:15 – 11:45	Basic vector graphics.
week 14 – May 10 8:15 – 11:45	Consultation. Exam.

Õppeainet kureeriv üksus:	School of Digital Technologies
Kursuseprogrammi koostaja	Andrus Rinde
Allkiri:	
Kuupäev:	09.01.2017

Kursuseprogramm registreeritud akadeemilises üksuses

Kuupäev	21.01.2017
Õppeassistendi nimi	Liina Kirsipuu
Allkiri	