Construction and maintenance of index languages and thesauri

Free: Group work or group discussion w/ instructor or individual work.
Group discussion: Start in full class, then split up into groups.

1	**Sep 2**	Introduction: General framework and overall organization (A). Groups
2		The entity-relationship approach to thesaurus construction
3	**Sep 9**	Discussion of mini-project. Final formation of groups.
4		Tutorial. Hierarchy from facet combination
5	**Sep 16**	Discussion of mini-project.. Discussion of term project
6		Group discussion of term project (if needed)
7	**Sep 23**	Questions on the readings. Group discussion: Scenario and scope, sources
8		Free
9	**Sep 30**	Group discussion: Review collection of terms. Discuss broad outline.
10		Free
11	**Oct 7**	General discussion of developing a conceptual schema and classified index.
12		Group discussion: Sorting into broad outline. Who is doing what subfield.
13	**Oct 14**	Group discussion: Discuss building classified index.
14		Free
	Oct 21	**No class.** ASIST meeting
15	**Oct 28**	Group discussion on the classified index, especially the conceptual schema
16		Free
17	**Nov 4**	Review discussion, based on readings from B - D and own experience
18		Evaluation of existing thesauri (lecture) Group discussion: Classified index.. Thesaurus format. (Outside class time)
19	**Nov 11**	Evaluation of existing thesauri (examples)
20		Class session: Computers in thesaurus construction (G) Automatic methods . (H)
21	**Nov 18**	Class session: Updating and maintenance. (J) Interoperability (K)
22		Integrated thesaurus database
23	**Nov 25**	Thesaurus software
24		A thesaurus as a knowledge base. Frame-based thesaurus models
25	**Dec 2**	Knowledge Organization Systems (KOS): Thesauri, taxonomies, ontologies and the semantic Web
26		KOS standards
27	**Dec 9**	Thesauri and ontologies on the Web. Related standards
28		Final review session
	Dec 16	Final exam (tentative date, to be scheduled)
	Dec 20	Deadline for handing in entire product

Outline and Calendar

1	**Sep 2**	**Introduction** Objectives, prerequisites, learning/teaching methods. Mini-project and main project. Knowledge organization systems (KOS): Thesauri, taxonomies, ontologies and the semantic Web First discussion of forming groups for main project: select a subject **Thesaurus construction: general framework and overall organization (A)** Finding thesauri. Thesauri on the Internet. See resource pages and email
2		**The entity-relationship approach to thesaurus construction** **Readings** The entity-relationship approach : Ch. 3 and Section 9.1 from Organizing Information The entity-relationship approach illustrated through the example of food data: Improving access to food and nutrition data. 2. A language for the description of foods in databases. With Appendix Functions of a thesaurus / classification / ontological knowledge base Classification for user support and learning Reading 1: The procedure of thesaurus construction: Sections F0.1, incl. Figures 52 and 53, F0.4.3, F0.5.1, F0.6, F0.7.2, F1 -F5.9; also E0, E1.0, E1.1, E1.5, E1.6, E1.8. Skip sections marked "advanced". **Mini-project** Start mini-project. **Due Monday, Sep 15** (can send by email) Goes hand-in-hand with reading about the process of thesaurus construction. Thesaurus forms will be distributed. **Preparatory assignments** on: Semantic factoring and hierarchy building assignments. (Only for students who did not do these in 670)

3	**Sep 9**	**Discussion of mini-project.** Any questions that might come up either on procedure or semantic structure of the subject matter, especially the structure of the conceptual schema using the entity-relationship approach and the structure of a facet frame. **Thesaurus software (TermMaster) and work flow.** **Final formation of groups.**
4		**Tutorial. Hierarchy from facet combination** For students who did not do this in 670 **Readings** Reading 2: Reading on conceptual structure (complementing the prerequisite reading): Sections B4.3, B6, C1.3.1, C1.3.2, C1.4, C1.5, C1.6, C3, C4. **Main project** Group: Define thesaurus scenario and scope and compile a list of sources (step F1.1). The list should contain an example for each type of source. (Some sources may require interlibrary loan, therefore it is necessary to start step F1.1 now even though the mini-project is not finished yet.)
5	**Sep 16**	**Discussion of mini-project**. **Discussion of main project** Questions on conceptual structure. Questions on procedure, especially on collecting terms. Group discussion of main project: scenario and scope **Readings** Reading 3: Reading on lead-in structure: Sections C5, C6, C7. Readings on Thesaurus software and workflow **Main project** Start collecting terms (step F1.2.2); collect about 200 terms per group member by September 23.
6		Group discussion of main project (if needed)

7	**Sep 23**	Questions on the readings. Group discussion: Scenario and scope, list of sources; methodology of transferring terms and relationships
8		Free **Main project** Finish collecting and inputting terms (Step F1.2). Sort alphabetically using WordPerfect(Step F2.1). Merge (step F2). Prepare first draft of broad outline for discussion
9	**Sep 30**	Group discussion: Review collection of terms. Discuss broad outline. **Main project** Sort terms according to broad outline (step F3.1).
10		Free
11	**Oct 7**	General discussion of **developing a conceptual schema and building a classified index.** Discussion of problems encountered so far and further procedure.
12		Group discussion: Review sorting into broad outline. Decide who is doing what subfield. **Main project** Start working on the classified index. Develop first draft of individual sections: Sort finely to detect groups of synonyms (Step F3.3.1). Do semantic factoring (Step F3.3.2) Develop the conceptual schema with emphasis on defining entity types. Start sorting elemental concepts into entity types

13	**Oct 14**	Group discussion: Building classified index. Start thinking about integrating the individual sections and coming up with an integrated conceptual schema. **Main project** Continue working on the classified index.
14		Free
	Oct 21	**No class.** ASIST meeting
15	**Oct 28**	Group discussion on the classified index, especially the conceptual schema **Readings** Reading 4: Thesaurus format: Sections D1-D1.6, D2 (skip D2.2), D3-D3.5. Review readings on conceptual structure, lead-in structure, and thesaurus format in light of project experience. Think about questions you want to ask/points you want discussed in class on Apr 4. **Main project** Think about the format of your thesaurus. Continue developing the classified index. Complete preliminary version of the arrangement within each entity type. Take a look at the whole product and make revisions to achieve consistency. Assign notations. Consult with the instructor as necessary.
16		Free

17	**Nov 4**	Review discussion: **Summary of terminological and conceptual structure.** (B4.3 etc.) **Concept formation in thesaurus construction** **Definitions and scope note** (C3) **Types of concepts, descriptors, terms to be included in an indexing language or a thesaurus** (C4) **The lead-in structure USE and SEE** (C5) **Synonyms proper and spelling variants** (C6) Also read C7 **Thesaurus format and design options:** **The different parts of a thesaurus** (D1 through D1.8) **Format of entries in the main part** (D2, omit D2.2) **Display of descriptors and their interrelationships** (D3-D3.5) **Notation** (D4)
18		**Evaluation of existing thesauri (lecture)** Group discussion: Classified index, thesaurus format (outside class time). **Readings** Reading 5: Computer assistance in thesaurus construction: chapter G, especially G0.1 and G0.2, skip G0.3, read G2.3, G2.4, G2.5. Automatic methods in thesaurus construction: Chapter H. **Main project** Develop cross-references within and between the individual sections (in groups) and streamline the classified index. Start working out main part.
19	**Nov 11**	**Evaluation of existing thesauri (examples)** Classified index due. Specification of thesaurus format due. Group discussion: Review building classified index. Discuss working out main part. **Main project** Work out main part. Write introduction (see Section D1.8).

20	**Nov 11 cont.**	Class session based on Reading 5 **Use of computers in thesaurus construction** (G) **Automatic methods ...** (H) **Readings** Reading 6: Updating and maintenance: Chapter J. Compatibility and cooperation: Chapter K, especially KO, K1 (skip p. 478-481), K1.2.3, K1.3 (skip 1.3.1), K2, K3. **Main project** Do sample indexing and evaluate results
21	**Nov 18**	Class session based on Reading 6 **Updating and maintenance of indexing languages and thesauri** **Thesauri as a basis for cooperation in information services** (K)
22		**Integrated thesaurus database** **Start working on paper**
23	**Nov 25**	**Thesaurus software**
24		**A thesaurus as a knowledge base. Frame-based thesaurus models**
25	**Dec 2**	**Knowledge Organization Systems (KOS):** **Thesauri, taxonomies, ontologies and the semantic Web**
26		**KOS standards**
27	**Dec 9**	Final review session
28		Continued
	Dec 16	**Final exam** (tentative date, to be scheduled) **Evaluation of an existing thesaurus** Every student will be given a thesaurus and prepare a written evaluation
	Dec 20	**Deadline for handing in entire product** (assemble the thesaurus for each group, but label individual sections with name of student). The individual papers go at the end.