COP 6731 – Advanced Database Management Systems

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Objectives:

The objective of this course is to prepare the students to work in areas related to multimedia databases and advanced information systems such as live video computing, Internet of things, computer-aided diagnosis of medical images, media on demand, and electronic commerce. Beside the lectures which provide a broad base for understanding the technologies, each student will read recent papers and perform an in-depth study on a specific topic.

Outcomes:

- The students will gain an in-depth knowledge in advanced database technology
- The students will acquire the proper training to continue their research in various areas of database technology
- The students will be able to apply the latest database technologies to other areas of research such as Internet of Things, computer vision, image processing, sensor networks, human computer interaction, information retrieval, data mining, social media, and real-time multimedia applications.

Prerequisite:

File structures, relational data model, query processing

Class Time:

Tuesday and Thursday 6:00 - 7:15PM, HEC – Eng1 435.

Office Hours:

Tuesday and Thursday 4:00 – 5:00PM.

Class Notes:

Available at http://www.cs.ucf.edu/~kienhua/classes/.

Topics:

System support for multimedia data, multidimensional data indexing techniques, image/video compression, image/video retrieval techniques, video delivery techniques for wired and wireless environments, image-data applications, database techniques for live video computing, Internet of Things.

Grading:

Test 1: 30%
Test 2: 35%
Critical reviews: 20%
Project: 15%

Final Exam: Scheduled by the university (FIRM!!)
### Important Dates:

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<tr>
<td>Withdrawal Deadline</td>
<td>March 18, 2014</td>
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<td>Martin Luther King Jr Day</td>
<td>January 20, 2014</td>
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<td>Spring Break</td>
<td>March 3-8, 2014</td>
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<td>Final Exam</td>
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<td>Last Day of Class</td>
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