Syllabus

Instructor
Dr. K. Kalpakis
Computer Science & Electrical Engineering Department
Office: ITE 348
Phone: (410) 455-3143
Email: kalpakis@csee.umbc.edu
Class homepage: http://www.csee.umbc.edu/~kalpakis/Courses/691A/
Office Hours: Tuesday and Thursday, 11:00am–noon, and by appointment.

Meeting Time and Place
Tuesday and Thursday 4:00am–5:15pm
Room ITE ACIV 305

Teaching Assistant: TBA, Room ITE TBA,
Phone: 410-455-TBA, Email: TBA@csee.umbc.edu
Office hours: Tuesday and Thursday, 10:00am-11:00am, and by appointment.

Important dates.

- Exam I, October 6, 2005, 11:30am–12:45pm.
- Final Exam, May 23, 2006, 3:30pm–5:30pm.

Prerequisites. Registration is by permission of the instructor only.

Text. The course is based on papers from the literature, which will be made available to the students by the instructor.

List of topics (tentative).

- Special topics (TBA)

Course description and objectives.
This is a seminar course, and it will be based on reading and discussing articles from the recent literature on the emerging area of streaming data systems, that arise due to a growing number of applications (e.g. continuous monitoring applications, sensor nets, etc). The course objective is to study problems and solution approaches used in the processing, resource management, design, and implementation of stream-based data systems.
Students will be required to present papers for discussion, participate in class discussions, write paper critiques, do homeworks, do a project, and take a final exam. A list of papers will be made available to the students registered in the course. The course grade will be based on these activities appropriately weighted (see Table 1).

The course is intended for research-oriented graduate or advanced undergraduate students.

Students are expected to have demonstrated strong performance in (graduate) algorithms, databases, and distributed systems, and have solid mathematical background.

**Required work.**

Required work consists of (1) present papers, (2) participate in class discussions, (3) write paper critiques, (4) do homework, (5) do project, (6) take the final exam.

**Ground Rules for Assignments**

- Assignment details, due dates, etc will be posted at the class homepage. Students are strongly advised to check the class homepage on a regular basis. Failure to do so is not an acceptable excuse for missing an assignment or for not adhering to the assignment’s instructions.

- You may develop the programs, if any, for your assignments using the computers available to you at UMBC, or any other computer available to you. However, no matter what computer you use to develop your programs, you must make sure that your programs can run successfully on the GL Linux computers at UMBC.

- All assignments must be submitted electronically by the date they are due according to the assignment’s submission instructions. No late assignments will be accepted, unless University Policy states otherwise.

- In submitting an assignment, students must adhere to the submission instructions specified by that assignment.

- The written part of each assignment must be typed using a word–processor of your choice (you may include hand–written mathematical formulas and/or diagrams as images in your documents). No matter how you prepare the written part of your assignment, it must submitted in the Adobe PDF format. No other formats are going to be accepted.

- No collaboration. Unless otherwise specified, each assignment is to be done and written individually by each student. Students should not collaborate on any assignment. The only exception would be for assignments for explicitly designated as team assignments, where team members are expected to collaborate in completing such an assignment.

- Students may be asked to come in and explain their solution(s) to an assignment to the instructor(s) and/or TA(s). Failure to satisfactory demonstrate authorship of a solution is a violation of Academic Integrity policy.

Students are strongly advised to keep up with the assignments and other coursework. Homework and project assignments do demand the amount of time allocated to them.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Homework</td>
<td>5%</td>
</tr>
<tr>
<td>Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Project</td>
<td>30%</td>
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<tr>
<td>Presentations</td>
<td>25%</td>
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<tr>
<td>Critiques</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>15%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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Table 1: Course Activities and their relative weights.

Exams
There will be a comprehensive final exam. All the exams will take place in class and will be closed-book and closed-notes. Make-up exams are possible only under University Policy. You should make prior arrangements with the instructor if you expect to miss an exam.

Each student should have his student photo identification card or driver’s license when taking an exam. Failure to produce a proper photo ID may result in getting a zero on that exam.

Communication
Students are strongly advised to check the class homepage, and the course Blackboard area http://blackboard.umbc.edu on a regular basis for news, announcements, and assignments. Failure to do so is not an acceptable excuse for missing an assignment or announcement.

Students are welcome to use the course Blackboard area to discuss topic matters. However, student’s are advised not to solicit or post solutions to any assignment or otherwise violate Academic Integrity policy.

Grading Policy
The course grades will be determined as follows. For each course activity in Table 1, each student will receive an activity score, which will be the average of the student’s scores on the assignments for that activity. An activity score is a number in the range 0...100. A term score will be computed by taking the weighted sum of the activity scores, using the relative weights given in Table 1. The instructor will convert term scores into letter grades by using the following mapping:

\[[90,100] \Rightarrow A, \ [80,90) \Rightarrow B, \ [70,80) \Rightarrow C, \ [60,70) \Rightarrow D, \ [60,100] \Rightarrow P, \ [0,60) \Rightarrow F.\]

Incomplete grades will issued only under those extreme situations described by University Policy for granting incompletes. Failure to complete assignments on time is not a sufficient reason for an incomplete.

Necessary, but not sufficient, conditions to pass the course are as follows: you must have at least 50% of the points for each activity.

Academic Integrity Policy.
By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC’s scholarly community in which everyone’s academic work and behavior are held to the
highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, **but is not limited to**, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

**There is no tolerance for academic dishonesty in this course. Any and all academic dishonesty acts will be treated severely, as prescribed in the UMBC’s Student Academic Conduct Policy.**

**ADA Compliance.**
We recognize that some of you may have disabilities that require special attention from the instructional staff. Please make us aware of them at your earliest so that UMBC can make suitable arrangements.