CSCE 242 - Client-Server Computing

1. Course number and name: CSCE 242 - Client-Server Computing

2. Credit: 3-hrs; Contact: 3 lecture periods of 50 minutes or 2 periods of 75 minutes per week

3. Instructor: Jose Vidal

4. Textbook: Selected readings from:

5. Specific course information
   b. Prerequisites: CSCE 190, 146
   c. Lower Division CSCE elective course.

6. Specific goals for the course
   a. Specific outcomes of instruction are that students will be able to:
      1. Design and build the datastore for a web application.
      2. Design and build the server-side code for a web application.
      3. Design and build the client-site code for a web application.
      4. Deploy a 3-tier web application.
   b. Relation of course outcomes to Student Outcomes: CE: see page 2; CS & CIS: see page 3

7. Topics covered and approximate weight 56 14
   1. Web history: HTTP, firebug (4 hours)
   2. Google app engine. Python. HTML (8 hours)
   3. App engine datastore: a noSQL datastore. (8 hours)
   4. Django templates. CSS (6 hours)
   6. JavaScript and the DOM. jQuery. (8 hours)
   7. App engine memcache. (2 hours)
   8. HTML5: localStorage. jQuery for iPhone. (2 hours)
   9. Canvas. SVG (2 hours)
   10. App engine XMPP (2 hours)
   11. REST (2 hours)
   12. Mashups: facebook, delicious, flickr, and others (2 hours)
   13. Another way: LAMP on EC2 (2 hours)
# Computer Engineering

Relation of Course Outcomes to EAC Student Outcomes*

<table>
<thead>
<tr>
<th>Course Outcomes (CE)</th>
<th>Student Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) apply knowledge of mathematics, science, and engineering</td>
<td>(b) design and conduct experiments, … interpret data</td>
</tr>
<tr>
<td>(c) design a system, component, or process to meet desired needs …</td>
<td>(d) function on multidisciplinary teams</td>
</tr>
<tr>
<td>(e) identify formulae, and solve engineering problems</td>
<td>(f) understanding of professional and ethical responsibility</td>
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<tr>
<td>(g) communicate effectively</td>
<td>(h) the broad education to understand the impact of engineering solutions …</td>
</tr>
<tr>
<td>(i) a recognition of the need, and an ability to engage in lifelong learning</td>
<td>(j) a knowledge of contemporary issues</td>
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<tr>
<td>(k) use the techniques, skills, and modern engineering tools …</td>
<td>(CE) demonstrate knowledge of discrete mathematics</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Criteria</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
<th>h</th>
<th>i</th>
<th>j</th>
<th>k</th>
<th>CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Datastore</td>
<td>2</td>
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<tr>
<td>2. Server-side code.</td>
<td>2</td>
<td>3</td>
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<tr>
<td>3. Client-side code.</td>
<td>2</td>
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<tr>
<td>4. Deploy</td>
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* 3 = major contributor, 2 = moderate contributor, 1 = minor contributor; blank if not related
## Computer Science & Computer Information Systems

Relation of Course Outcomes to CAC Student Outcomes*

<table>
<thead>
<tr>
<th>Course Outcomes (CS &amp; CIS)</th>
<th>Student Outcomes</th>
<th>All</th>
<th>CS</th>
<th>CIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) apply knowledge of computing and mathematics appropriate to the discipline</td>
<td>(b) analyze a problem, and identify and define the computing requirements</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(c) design, implement, and evaluate a computer-based system, ...</td>
<td>(d) function effectively on teams to accomplish a common goal</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(e) An understanding of professional, ethical, legal, ... responsibilities</td>
<td>(f) communicate effectively with a range of audiences</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(g) analyze the local and global impact of computing on ... society</td>
<td>(h) Recognition of the need for ... continuing professional development</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(i) current techniques, skills, and tools necessary for computing practice</td>
<td>(j) apply mathematical foundations, algorithmic principles, and CS theory ...</td>
<td>2</td>
<td>2</td>
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<tr>
<td>(k) apply design and development principles</td>
<td>(j) An understanding of processes that support the information systems environment</td>
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1. Datas
torage
2. Server-
side code
3. Client-
side code
4. Deploy
5. :

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