UAM Assessment Report 2013-2014
School of Computer Information Systems
1. What are the Student Learning Outcomes (SLOs) for your unit? How do you inform the public and other stakeholders (students, potential students, the community) about your SLOs?

Graduates from the School of Computer Information Systems (CIS) should have mastery of the student learning outcomes listed below. A further explanation of each SLO is located in Appendix A. The School of CIS website also has a complete list of student learning outcomes:


SLO 1 - Practical knowledge of various productivity software packages.
SLO 2 - Practical knowledge of various programming languages.
SLO 3 - Knowledge of information systems development methods and techniques.
SLO 4 - Knowledge of data communications and local area networks.
SLO 5 - Knowledge of communication skills.

Each syllabus (Appendix B) lists the student learning outcome(s) that pertain to that course. Promotional PowerPoint presentations also contain the SLOs and are shown during special events such as Scholar’s Day and Weevil Welcome Days. The presentations are also located on the CIS website:

http://www.uamont.edu/cis/2014assessment/cismajor.ppt
http://www.uamont.edu/cis/2014assessment/cisminor.ppt
http://www.uamont.edu/cis/2014assessment/ciscert.ppt

Prospective students who express an interest in pursuing a major, minor, or advanced certificate in CIS receive a personalized letter (Appendix C) from the dean with an attached copy of the School of CIS brochure (Appendix D) and degree requirements. The current brochure does not contain a specific listing of the department’s SLOs; however, it emphasizes the various productivity software packages offered (SLO 1), the various programming languages offered (SLO 2), problem solving utilizing verbal/written communication skills (SLO 3 and 5), networking (SLO 4) enabling the student to advance in a complex business environment in the brochure.

The School of Computer Information Systems has no accrediting body.

2. Describe how your unit’s Student Learning Outcomes fit into the mission of the University.

The University of Arkansas at Monticello shares with all universities the commitment to search for truth and understanding through scholastic endeavor. The University seeks to enhance and share knowledge, to preserve and promote the intellectual content of society, and to educate people for critical thought. The University provides learning experiences which enable students to synthesize knowledge, communicate effectively, use knowledge and technology with intelligence and responsibility, and act creatively within their own and other cultures.
The University strives for excellence in all its endeavors. Educational opportunities encompass the liberal arts, basic and applied sciences, selected professions, and vocational and technical preparation. These opportunities are founded in a strong program of general education and are fulfilled through contemporary disciplinary curricula, certification programs, and vocational/technical education or workforce training. The University assures opportunities in higher education for both traditional and non-traditional students and strives to provide an environment which fosters individual achievement and personal development.

Student Learning Outcomes 1, 2, and 4 (Appendix A) address aspects of UAM’s mission that “…enable students to synthesize knowledge, communicate effectively, use knowledge and technology with intelligence and responsibility, …”. These SLOs focus on teaching students to be good learners. The software packages, programming languages, and data communications standards and methodologies will continue to change due to the rapid pace of change within the IT industry, but the purpose behind these SLOs is to teach students how to effectively learn and utilize new concepts, and how to best apply that knowledge.

SLO 3 relates directly to the University mission to “educate people for critical thought.” Systems analysis is the second step in information systems development, and critical thinking skills are a core component of this area. Successful students should develop the ability to analyze both existing systems and proposals, address problem areas, and be able to develop solutions.

SLO 5 relates to larger sections of the University’s mission. Phrases such as “…seeks to enhance and share knowledge” and “enable students to synthesize knowledge, communicate effectively, use knowledge and technology with intelligence and responsibility, and act creatively within their own and other cultures” stress the importance of sharing and communicating the knowledge learned. To stress this SLO, students are encouraged to work in groups to share their skills. They are also urged to practice communications by writing memos, status reports, and system manuals, as well as preparing and giving oral presentations for their peers. Throughout the CIS curriculum, good communication skills are continually stressed, and the students share their knowledge via presentations and documents they create.

3. Provide an analysis of the student learning data from your unit. How is this data used as evidence of learning?

Learning among students in the School of CIS is assessed by the students’ final grade in the course and their results on pre-course and post-course exams. A student’s final grade is earned through a variety of learning assessment tools that include exams, quizzes, homework, programming assignments, projects, presentations, and research papers. Each course uses multiple methods because each assessment tool measures the students’ understanding of the material differently. Exams, quizzes, and homework measure the students’ ability to retain material covered in class, while programming assignments and projects tend to require students to demonstrate comprehension and critical thinking skills. Several CIS courses also include presentations to further develop their oral communication skills and research.
papers to develop their written communication skills. For each course listed below, the weighted breakdown of each assessment tool demonstrates how they contribute to the student’s final grade.

For purposes of this analysis, the School of CIS collected student performance data from four courses that are required in the CIS curriculum, representing different levels of the program: CIS 2203 Programming Logic and Design, CIS 3523 System Analysis and Design, CIS 4623 Database Management Systems, and CIS 4634 Application Software Development Project. The first three courses serve as the program’s prerequisites for subsequent coursework that must be completed as the student advances in the program, and the last course is the capstone of the program. These prerequisites are in place to require students to demonstrate an acceptable grasp of the concepts before they are allowed to progress in the program. Their successful progression demonstrates evidence of their learning.

CIS 2203 Programming Logic and Design is intended for students in their sophomore year and provides the CIS major with exposure to programming logic and theory, problem solving and debugging techniques, and modeling tools to demonstrate the logical flow of a program. These concepts are independent of any particular programming language. This course serves as the prerequisite for all upper-level programming courses, requiring a grade of “C” or better to advance to the required and elective programming courses. Course content directly relates back to SLO 2 and SLO 3 (Appendix A). The student’s final grade is earned through four exams which make up fifty percent of the student’s grade. Programming assignments constitute eighteen percent of a student’s grade, attendance counts as eleven percent of the grade, and quizzes and other assignments count in the remaining twenty-one percent. (See Appendix B for the course syllabus.)

Once a student has completed CIS 2203 and either CIS 3423 COBOL or CIS 3443 Object-Oriented Programming Languages with a grade of “C” or better, both of which are required in the CIS curriculum, the student may enroll in CIS 3523 System Analysis and Design. This course, intended for students who have reached junior status, teaches them how to design, implement, evaluate, and document their programs. Course content relates directly to SLO 2, SLO 3, and SLO 5 (Appendix A). Students must complete this course with a grade of “C” or better to fulfill one of two prerequisites for CIS 4634 Application Software Development Project. The student’s final grade is earned through a variety of learning assessment tools, as seen in the following table. (See Appendix B for course syllabus.)
<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Number &amp; Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>40 class periods at 2 points per class</td>
</tr>
<tr>
<td>Weekly Status Report</td>
<td>13 weeks at 5 points per report</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10 quizzes at 10 points per quiz</td>
</tr>
<tr>
<td>Exams</td>
<td>3 exams at 20 points per exam</td>
</tr>
<tr>
<td>Presentations</td>
<td>3 presentations at 50 points per presentation</td>
</tr>
<tr>
<td>Presentation Papers</td>
<td>2 presentation papers at 20 points per paper</td>
</tr>
<tr>
<td>Presentation Analysis Memo</td>
<td>2 presentation analysis memos at 10 points each</td>
</tr>
<tr>
<td>Documentation Manual</td>
<td>3 manuals at 30 points per manual</td>
</tr>
<tr>
<td>Book of Knowledge (Notes, research, etc)</td>
<td>1 book at 30 points</td>
</tr>
<tr>
<td>Class Assignments (Questionnaire, prototypes, diagrams, scenarios)</td>
<td>24 assignments totaling 115 points</td>
</tr>
<tr>
<td>Etiquette Lunch</td>
<td>1 Etiquette Lunch at 15 points</td>
</tr>
</tbody>
</table>

Students who have successfully completed CIS 3423 COBOL and CIS 3443 Object-Oriented Programming are eligible to enroll in CIS 4623 Database Management Systems, the second of the two prerequisites mentioned above. This course teaches students the valuable concepts of database storage, a growing sector of the information technology industry. Students learn about file/data organization, access features, data structuring, and database layout and design. Students learn how to gather information from databases using Structured Query Language (SQL). Course content relates to SLO 2 and SLO 3 (Appendix A). The student’s final grade is earned through completing three exams ranging from one hundred to one hundred-thirty points per exam, a fifty-point team project, and weekly assignments and quizzes totaling one hundred-fifty points. (See Appendix B for course syllabus.)

Students who have successfully completed CIS 3523 System Analysis and Design and CIS 4623 Database Management Systems will progress to CIS 4634 Application Software Development Project. As the capstone course of the program, students are asked to draw upon the sum of their CIS coursework. Students successfully completing this course will have demonstrated the ability to analyze, design, code, test, document, and present an information system of their own concept, design, and implementation from beginning to end. This course is intended to provide students the opportunity to demonstrate cumulative evidence of their learning and to serve as a selling point during the interview process and as a reference point for their future careers. The student’s final grade is based upon the completion of several learning assessment tools, as displayed in the following table. (See Appendix B for course syllabus.)
### Deliverable Points

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAM Application for Employment - Handwritten</td>
<td>5</td>
</tr>
<tr>
<td>Resume &amp; Reference Sheet v.1</td>
<td>5</td>
</tr>
<tr>
<td>Resume &amp; Reference Sheet v.2</td>
<td>5</td>
</tr>
<tr>
<td>Resume &amp; Reference Sheet v.3</td>
<td>5</td>
</tr>
<tr>
<td>Cover Letter v.1</td>
<td>5</td>
</tr>
<tr>
<td>Cover Letter v.2</td>
<td>5</td>
</tr>
<tr>
<td>SAD Manual</td>
<td>15</td>
</tr>
<tr>
<td>Presentation &amp; Hard Copy</td>
<td>10</td>
</tr>
<tr>
<td>Myers Briggs &amp; two other personality tests</td>
<td>5</td>
</tr>
<tr>
<td>Interview Answers</td>
<td>5</td>
</tr>
<tr>
<td>Behavioral Interview Answers</td>
<td>5</td>
</tr>
<tr>
<td>Phone Interview Notes</td>
<td>5</td>
</tr>
<tr>
<td>In-Person Interview Notes</td>
<td>5</td>
</tr>
<tr>
<td>Project Demonstration</td>
<td>20</td>
</tr>
<tr>
<td>Knowledge Contributions</td>
<td>5</td>
</tr>
<tr>
<td>Documentation Hard Copy</td>
<td>15</td>
</tr>
<tr>
<td>Pre/Post Test Evaluation</td>
<td>5</td>
</tr>
<tr>
<td>Final Presentation Hard Copy</td>
<td>10</td>
</tr>
<tr>
<td>Weekly Status – 12 Weeks @ 5 points each</td>
<td>60</td>
</tr>
<tr>
<td>Written Paragraph – 6 Weeks @ 5 points each</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>225</strong></td>
</tr>
</tbody>
</table>

From the summer 2013-spring 2014 student performance data, the reviewer can observe that across all sections of the four courses, 126 students were enrolled. Ninety-nine (78.57%) successfully completed these courses, progressing in the program and demonstrating evidence of learning. This includes three students who received a “D” in CIS 4634 Application Software Development Project, thus passing the course. Of the remaining twenty-seven (21.43%) students who did not advance in the program, seventeen students received a grade of “D” passing the course but were unable to continue their progression (excepting three students who passed CIS 4634 with a “D” and completed this requirement); five students received a grade of “F” and eight students receiving a “W”.

#### Historical Data for Grade Distribution of Four-course Subset

<table>
<thead>
<tr>
<th>Year</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-Dec 2009</td>
<td>29</td>
<td>39</td>
<td>35</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>125</td>
</tr>
<tr>
<td>Jan-Dec 2010</td>
<td>30</td>
<td>40</td>
<td>14</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>105</td>
</tr>
<tr>
<td>Jan-Dec 2011</td>
<td>47</td>
<td>31</td>
<td>18</td>
<td>9</td>
<td>5</td>
<td>12</td>
<td>122</td>
</tr>
<tr>
<td>2012-Spring 2013</td>
<td>52</td>
<td>58</td>
<td>33</td>
<td>13</td>
<td>9</td>
<td>21</td>
<td>186</td>
</tr>
<tr>
<td>Summer 2013-Spring 2014</td>
<td>34</td>
<td>42</td>
<td>20</td>
<td>17</td>
<td>5</td>
<td>8</td>
<td>126</td>
</tr>
</tbody>
</table>
We can compare this subset of courses to grades earned in all CIS courses during the summer I & II 2013 semesters, fall 2013, and spring 2014 semesters.

Grades by Letter for All CIS Courses Summer 2013-Spring 2014

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2014</td>
<td>361</td>
<td>288</td>
<td>165</td>
<td>84</td>
<td>88</td>
<td>59</td>
<td>1,045</td>
</tr>
</tbody>
</table>

Grade Distribution by Percentage Comparison for Summer 2013-Spring 2014

<table>
<thead>
<tr>
<th>Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-class subset</td>
<td>26.98%</td>
<td>33.33%</td>
<td>15.87%</td>
<td>13.49%</td>
<td>3.97%</td>
<td>6.35%</td>
</tr>
<tr>
<td>All CIS Classes</td>
<td>34.55%</td>
<td>27.56%</td>
<td>15.79%</td>
<td>8.04%</td>
<td>8.42%</td>
<td>5.65%</td>
</tr>
</tbody>
</table>

Comparing the grade distribution of the four-class subset to the grade distribution of all CIS courses, several things are apparent. The overall success rate (grades of “A”, “B”, “C”) is similar between the two data sets: 76.18% for the four-class subset versus 77.9% for all CIS classes. The higher percent of “D” in the four-class subset will, in most cases, prevent the student from progressing in the program; the School of CIS must seek out ways to reduce the number of “D’s” in these courses. The inclusion of more freshmen level CIS courses (21 classes in total) in the all-courses data set may explain the higher percent of “F’s”, as freshmen are less likely to withdraw, even if they have stopped attending school.

Further, the statistics from the CIS 4634 Application Software Development Project in its role as the capstone course successfully demonstrates evidence of learning. During the fall 2013-spring 2014 period, twenty-three student course-attempts were enrolled and twenty (86.96%) successfully completed it. Of the three failed attempts, one student later passed the course in the spring 2014. The remaining students have yet to complete the course.

Beginning in fall 2012 and continuing through the spring 2014 semester, the School of CIS measured student learning by initiating pre-course and post-course exams. Pre-course exams were administered on the first or second day of the class to measure their knowledge of the subject matter before instruction began. Post-course exams were given at the end of the semester to measure their knowledge upon completion of the class. Pre-course and post-course exams were implemented in a variety of classes, including required and elective courses in the CIS curriculum. Eleven courses were given the exams during fall 2013 and nine courses were given the exams during spring 2014 and included freshman-, sophomore-, junior-, and senior-level courses.

During the two semesters, 253 students took the pre-course exams and 221 took the post-course exams; thirty-two students were either absent or dropped the courses. Of the 221 students who took both pre-course and post-course exams, only one student did not improve upon their pre-course exam score. Student pre-course and post-course exam data is summarized in the table below.
Results were consistent across semesters, with the average student score more than doubling from pre-course to post-course exam and average scores ranging from 74.33% to 78.40% over the two years tested. Pre-course exam scores establish a baseline of subject matter knowledge, with a low percentage of students scoring at a passing level. Post-course exam results are encouraging, with scores improving to success (pass) levels ranging between 79.33% and 91.25%. The significant increase in average scores and pass rates demonstrate that significant learning took place in the courses tested. Faculty can also use the post-course exam results to search for trends regarding topics in which students are consistently strong and in other areas that might require more time or emphasis in class. The School of CIS will continue administering pre-course and post-course exams and analyzing the results in an effort prove continuous improvement in student learning.

4. Based on your analysis of student learning data in Question 3, include an explanation of what seems to be improving student learning and what should be revised.

In fall 2013-spring 2014, the School of CIS faculty met twice to discuss student learning, the CIS curriculum, and possible changes to the program (Appendix E). Faculty meetings are used to discuss feedback from student course evaluations, senior exit surveys, alumni surveys, faculty perceptions from the classroom, and trends in the Information Technology field. These sources of input assist in defining the direction of the CIS program.

To look at specific issues that appear to be improving student learning and what needs to be improved, the School compared student performance from the summer and fall 2013-spring 2014 in the selected courses discussed above to student performance during 2010-spring 2013. Comparing the data from question three to the history of the program, completion rates for the four-course data subset have been as follows:

<table>
<thead>
<tr>
<th>Historical Data of Completion Rates for the Four-course Subset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
</tr>
<tr>
<td>2010</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>2012 – Spring 2013</td>
</tr>
<tr>
<td>Summer 2013 – Spring 2014</td>
</tr>
</tbody>
</table>
Looking at the academic performance data from the historical perspective for four-course subset, student learning and academic progression is strong. Likewise, looking at summer 2013-spring 2014 academic performance for all CIS courses has a success rate of 77.9% and is further evidence of strong academic performance.

The only significant change to any of the four classes analyzed over the time period was the addition of an online section of CIS 2203; but with a four-year success rate of 78.54%, the School of CIS considers this success rate acceptable. The data shows that the largest group of students who failed to complete these courses is the group receiving the grade of “D” (11.11%), passing the class but not earning the grade necessary to continue their progression, excepting the CIS 4634 Application Software Development Project, which can be completed with a “D”. There is also a substantial group of students withdrawing from the courses in question (6.35%). Students withdraw from class for a variety of reasons, some of which faculty cannot impact; but, reducing the number of students who withdraw would be a benefit to retention and student progress. The School of CIS continues to research new ways to improve retention.

During the 2012-spring 2013 period, two faculty members began to email students who missed class with a synopsis of what they missed; faculty continued this practice during the 2013-2014 academic year. The goal is to help absent students keep up with their work, in the hope that they would not get so far behind that they considered the course hopeless and drop. The School of CIS will continue to build on this initiative in an effort to improve retention.

<table>
<thead>
<tr>
<th>Grade Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2013</td>
</tr>
<tr>
<td>CIS 1013-03</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>CIS 2223-03</td>
</tr>
<tr>
<td>Spring 2014</td>
</tr>
<tr>
<td>CIS 1013-03</td>
</tr>
<tr>
<td>CIS 2223-04</td>
</tr>
</tbody>
</table>

There is slight evidence to indicate that the extra contact attempts are helping, but the sample size is too small to provide significant evidence at this time. The School of CIS will continue to monitor future semesters.

The School of CIS also implemented a CIS tutoring program during the spring 2013 semester to target students who need extra help outside of class. The program began with a small rollout of only two students seeking tutoring in spring 2013 and did not generate significant student interest during the fall 2013 semester, with two students expressing interest and neither actually meeting with a tutor. However, during the spring 2014 semester, eleven different students met with two CIS tutors for assistance in the four courses listed below (all required courses for the CIS curriculum).
## Grade Distribution for Spring 2014

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2203-01</td>
<td>8</td>
<td>12</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>CIS 3423-01</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>CIS 3443-01</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>CIS 4634-01</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td><strong>Combined</strong></td>
<td>25</td>
<td>22</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td><strong>62</strong></td>
</tr>
<tr>
<td><strong>Grade %</strong></td>
<td>40.32%</td>
<td>35.48%</td>
<td>12.90%</td>
<td>6.45%</td>
<td>1.61%</td>
<td>3.23%</td>
<td></td>
</tr>
</tbody>
</table>

The grade distribution for these four classes that had students utilize the tutoring program had excellent success numbers, with 88.70% of students in these four courses earning a grade of “A”, “B”, or “C”. Grades of “F” and “W” were both also reduced from other CIS courses. Early indications are that the tutoring program is improving student averages, when comparing the grade distribution for these four courses to the fall 2013 semester when none of the students used the tutoring.

## Grade Distribution for Fall 2013

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2203-01</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>CIS 3423-01</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>CIS 3443-01</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>CIS 4634-01</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td><strong>Combined</strong></td>
<td>16</td>
<td>12</td>
<td>11</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td><strong>53</strong></td>
</tr>
<tr>
<td><strong>Grade %</strong></td>
<td>30.19%</td>
<td>22.64%</td>
<td>20.75%</td>
<td>13.21%</td>
<td>5.66%</td>
<td>7.55%</td>
<td></td>
</tr>
</tbody>
</table>

During the fall 2013 classes when no students used the available tutoring, there are a lower percentage of “A’s” and “B’s” and a higher percentage of “C’s”, “D’s”, “F’s”, and “W’s.” The early numbers are positive for the program but data will continue to be collected before more definitive conclusions can be drawn. During the fall 2014 School of CIS department meeting, faculty will be discussing the tutoring program and its possible expansion.

Faculty also implemented several changes that positively impacted student learning and added new dimensions to the student’s experience during the semesters to come. These changes included the following:

- For the spring 2014 semester, Ms. Selby created Blackboard shells for all of her courses, including face-to-face courses. This allowed students full knowledge of their grade, as well as provided a schedule with due dates for all assignments for the entire semester. She also added grades for attendance, with students receiving ½ point for each class attended, and provided documentation to students explaining the basic functionality of Blackboard for uploading files, downloading assignments, and setting up their mobile devices to receive messages. In the previous semester, Ms. Selby taught two sections of CIS 2203 Programming Logic & Design (one online and one in class), one section of CIS 3423 COBOL, and one section of CIS 3553 Advanced COBOL. For the spring 2014 semester, Ms. Selby taught one section of CIS 2203 Programming
Logic & Design, one section of CIS 3423 COBOL, and one section of CIS 3553 Advanced COBOL. Looking at the grades by percentage, there were marked improvements in the number of students receiving a grade of “A” or “B”, and decreases in “C”s, “D”s, “F”s, and “W”s. The School of CIS will continue to monitor this technique to see if the improvements continue.

Grade Distribution Comparing Blackboard’s Effectiveness for Ms. Selby’s Courses

<table>
<thead>
<tr>
<th>Semester</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2013 (without Blackboard)</td>
<td>28.33%</td>
<td>30.00%</td>
<td>20.00%</td>
<td>10.00%</td>
<td>6.67%</td>
<td>5.00%</td>
<td>60</td>
</tr>
<tr>
<td>Spring 2014 (using Blackboard)</td>
<td>36.84%</td>
<td>50.88%</td>
<td>10.53%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>1.75%</td>
<td>57</td>
</tr>
</tbody>
</table>

- In CIS 3433 Introduction to C# Programming, Ms. Hendrix added a SQL Server component to the course, in which students connect with an SQL Server database to provide an introduction to database concepts before they enter CIS 4623 Database Management Systems. Students completing CIS 3433 should now have a basic understanding of SQL Server when they enter the database course.
- In CIS 2223 Microcomputer Applications, Ms. Cossey began offering students a bonus-point opportunity in the online section. Noticing that students did not read the feedback given on homework assignments, she began offering points to students responding to a note in the grading comments of assignments. She tried it twice during the semester and approximately 30% of students responded. There was a “success” (A, B, or C) rate of 65.79%, slightly below the average success rate across all CIS courses. This idea definitely bears watching in the future.
- In CIS 4634 Application Software Development Project, students are now required to produce cover letters, resumes, and reference sheets. They are also required to participate in two mock interviews and receive feedback on their performance. Early in the course, each CIS faculty member provides a short positive comment about the strengths of each student in the class as a confidence-building exercise. The goal of the CIS 4634 capstone course is to prepare students to enter the workforce. To that end, adding interview and job application components expands their learning. This change relates directly back to SLO 5 (Appendix A).

5. Other than course level/grades, describe/analyze other data and other sources of data whose results assist your unit to improve student learning.

The School gathers information from a multitude of sources to assess and refine the program. These sources include results from the senior exit survey, the alumni survey, faculty meetings, the annual CIS Alumni Day, the newly implemented pre-course and post-course exams, and informal contacts with alumni, businesses, and organizations. Feedback from all of these sources, along with academic performance, is taken under consideration when the faculty reviews the CIS curriculum and course offerings.

The CIS senior exit survey (Appendix F) allows CIS majors completing the program an opportunity to provide feedback on areas of the program they feel prepared them well, as well as areas they would like...
to see improved or expanded. During fall 2013 and spring 2014, twenty students completed the survey. The results of this year’s survey were consistent with years past, with students rating the program’s performance in the SLO areas in the Excellent or Outstanding range, with the exception of SLO 4, Knowledge of data communications and local area networks in a slightly lower range (3.44 on a scale of 1-5). Students would like to see expanded opportunities in this area.

In their evaluation of the CIS Program, four of the eight aspects scored in the Excellent or Outstanding range, with CIS Club (3.75), Quality of Equipment and Facilities (3.67), Quantity of Equipment and Facilities (3.83), and Library Holdings and Facilities scoring slightly lower in the upper portion of Average. In the summer of 2012, the School upgraded hardware and software in an attempt to improve student and faculty concerns with equipment and facilities. The CIS faculty has discussed student feedback regarding the CIS Club and continues to look for ways to increase participation.

The CIS alumni survey (Appendix G) is conducted annually and surveys graduates at one-year, three-year, and five-year intervals. The data is then processed and compared to historical results from the previous four surveys. In fall 2013, graduates from the 2008, 2010, and 2012 graduating classes were surveyed. The survey was modified in 2011 in an attempt to improve response rates and was posted on the UAM website for completion; previous versions had to be returned by the postal service. Alumni to be surveyed were contacted with three emails containing the survey link, as well as a postcard containing the link sent to the mailing address on file. Participation remained slightly lower than previous years, with only 15.7% returning the surveys. In 2012, the rate of return was 18.6% of alumni surveyed responding compared to 16.4% in 2011.

Alumni are asked to evaluate the School of CIS regarding the student learning outcomes, the program’s supportive requirements, and other aspects of the program. The student learning outcomes and supportive requirements were measured regarding the amount of growth the student experienced in this area with 1 = “No growth” and 5 = “Great growth”. Students were also asked to evaluate the amount of emphasis placed on the area where 1 = “Too little”, 2 = “About right”, and 3 = “Too much”. The alumni evaluation of meeting the student learning outcomes mirrored the results of the senior exit survey. Student learning outcomes 1, 2, 3, and 5 received strong positive growth responses (75% - 100%) from respondents but student learning outcome 4 received 50% positive growth. The primary reason for the lower scores is reflected in the Emphasis score, with 87.5% of respondents saying this SLO received “too little” emphasis. The School is exploring the possibility of encouraging students to take additional elective courses in this area at one of the UAM Colleges of Technology, which currently have resources and programs in this area.

The 2013 survey results show continued strong performance in the areas of Academic Advising, Quality of Instruction, Class Size, CIS Faculty, CIS Staff, Personal Attention, and Availability of Classes. These responses demonstrate the emphasis that the CIS faculty put on retention by developing relationships with the students. Areas that alumni would like to see addressed include modifications of the CIS curriculum, supportive classes, and CIS facilities. Comments included in the survey requested more options in the networking and data communications, additional operating systems, and database implementation and design.
The most recent CIS Employer Survey (Appendix H) was conducted in 2013. It is submitted to known employers of UAM CIS graduates and to potential employers around the state and the region once every five years. Employers were asked to rate the importance of skills in the following areas for their organizations:

- Analytical and Critical Thinking Skills
- Business Fundamentals
- Interpersonal, Communication, and Team Skills
- Technology Skills
- Business System Development

These categories address all five of the Student Learning Outcomes for the School of CIS. After rating the importance of each skill area, employers were asked to rate how well UAM graduates performed in the same areas.

The survey revealed a majority of employers, across several industries, placed high value on possessing strong Analytical and Critical Thinking Skills, Interpersonal Communication, and Teaming Skills but slightly less importance on Business Fundamentals. In the employers’ assessment of UAM graduates, most of the responses rated skills as “Average.” In the two skills areas in which employers placed high value, UAM graduates scored strongly in sub-areas: Problem Solving, Critical Thinking, Ethics, Ability to Learn, Motivation, Dependability, and Team Work. UAM graduates recorded weaker scores in Conflict Management, Writing, Time Management, and Professionalism.

Technology Skills scores varied across categories with strong performances in Word Processing, Spreadsheets, PC Databases, which relate to SLO 1; but with weaker scores in Programming Languages, Database Design and Administration, and Networking, which relate to SLO 2 and SLO 4. These finding will be discussed in the School of CIS faculty meeting in fall 2014. The faculty will continue to look for cost-effective solutions to enrich students’ options in these areas.

The School of CIS faculty met two times (Appendix E) in 2013-2014 to discuss student performance, curriculum, and overall direction of the program. Faculty discussed and agreed upon the suggestion to allow students to choose to take CIS 3463 Programming Mobile Apps instead of the required CIS 3453 WWW Programming. This proposal was delayed in getting to C & S in the spring, so the proposal is scheduled to be submitted in the fall 2014.

The School of CIS implemented pre-course and post-course exams for select CIS courses beginning in the fall 2012 semester. Students were informed before both exams that this would not be part of their grade but to give their best effort. As referenced in question three, only one of the 221 students taking a post-course exam did not improve his/her score. Average student scores more than doubled over the course of the semester. This affirms that student learning is occurring in these core courses. As an added benefit, faculty has a comprehensive look at students’ knowledge of topics covered throughout the semester. This data could have significance to faculty in tracking areas in which students historically struggle to grasp certain concepts and can adapt the course content to improve student comprehension.
### Historical Data for Pre-course & Post-course Exams

<table>
<thead>
<tr>
<th>Semester</th>
<th>Number of Students</th>
<th>Average Score</th>
<th>% of Students Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-exam</td>
<td>Post-exam</td>
<td>Pre-exam</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>136</td>
<td>121</td>
<td>33.11%</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>120</td>
<td>115</td>
<td>30.11%</td>
</tr>
<tr>
<td>Fall 2013</td>
<td>137</td>
<td>112</td>
<td>29.32%</td>
</tr>
<tr>
<td>Spring 2014</td>
<td>116</td>
<td>109</td>
<td>29.23%</td>
</tr>
</tbody>
</table>

CIS Alumni Day is an annual event that features CIS graduates speaking to CIS majors and minors. Alumni are invited from a variety of careers in the Information Technology industry and cover topics such as finding a job, grade importance to job prospects, the direction of the IT industry, listening to the faculty, and demonstrating professionalism. This event reconnects graduates with their faculty and opens discussion to the technology they are using and what directions their employers are moving. Seeing former students who are now IT professionals motivates and inspires current students and provides critical opportunities to network and learn about potential employers. CIS Alumni Day was held on March 14, 2014, with eight CIS alumni speakers (Appendix I).

Faculty also gains insight through informal conversations and personal relationships with alumni, recent graduates going through the interview process, and contacts with employers. These relationships help establish what employers are looking for in graduates, areas where UAM graduates are strong, and areas that need to be improved. During the 2013-2014 year, several alumni stopped by to visit with faculty, contacted faculty with job opportunities, and visited the UAM Career Fair to recruit for their companies. This invaluable feedback can guide faculty to better shape the direction of the CIS program.

### 6. As a result of the review of your student learning data in previous questions, explain what efforts your unit will make to improve student learning over the next assessment period. Be specific indicating when, how often, how much, and by whom these improvements will take place.

The School of CIS is considering several options to improve student learning. Referring to the historical grade data referenced in question 3, the School must find a way to reduce the number of students withdrawing from the core courses. This will continue to be a central topic for faculty discussion during the coming school year. Concepts such as the synopsis emails to students who missed class and upper-level course tutoring will continue to be expanded upon. Finding a way to retain these students will improve student learning, as well as the department’s retention rates.

One method to assist in student retention and improve student learning will be the continued expansion of a programming language tutor program. Initial rollout of this program began in spring 2013 with limited offerings in CIS 3423 COBOL and CIS 3553 Advanced COBOL. CIS 2203 Programming Logic & Design and CIS 3443 Object-Oriented Programming were added in the fall 2013. For the fall 2014 semester, the School plans to add CIS 3453 World Wide Web Programming, CIS 3523 Systems Analysis and Design, and CIS 4623 Database Management Systems. Each of these courses is part of the required core of the CIS curriculum. The program features prospective tutors who have demonstrated strong
competency in successfully completing these courses and have been nominated by their instructors. Tutors are scheduled as work-study by the School of CIS to work with students who are struggling in these courses. The unit head and faculty teaching these courses will work with the tutors and students to schedule meeting times as requested by the students. The School of CIS will continue to monitor student performance in these courses to measure the impact of the tutoring program.

To improve student retention, the School of CIS will also begin a freshman mentoring program in which freshmen CIS majors will be partnered with senior CIS majors. A fall kickoff meeting is being planned by the unit head for early September to invite freshmen CIS majors and to encourage them to contact their senior mentor for advice regarding classes, teachers, financial aid, and other student issues.

Another means of improving student retention within the CIS major itself will come from monitoring CIS student progress. During the fall 2013 semester, the School of CIS tracked progress of CIS majors, monitoring how many students graduated, changed majors, transferred, and dropped out. In August 2014, faculty will assess student progress through the program and will attempt to contact students who changed majors or withdrew to determine the reasons why these students did not complete the program, hoping this information can be used to aid in retention.

One of the most requested items on both the alumni survey responses (Appendix G) and the senior CIS exit survey (Appendix F) is the need for more classes in the area of data communications and networking. The School of CIS has discussed advising students to consider elective choices at the UAM’s Crossett campus in Computer Repair and Networking and Computer Maintenance/Networking. Students are allowed to transfer up to six hours of technical credit to count toward their Bachelor of Science in Computer Information Systems, and the Crossett campus offers courses in technical networking, CISCO hardware/software, voice and data cabling, and network operating systems. These technical courses offer students additional elective options and address a frequent request for more options in the area of data communications and networking. This topic will be discussed again during the fall 2014 CIS faculty meeting.

7. What new tactics to improve student learning has your unit considered, experimented with, researched, reviewed or put into practice over the past year?

One tactic to improve student learning has been to include a Blackboard component into CIS 2203 Programming Logic and Design, CIS 3423 COBOL, and CIS 3553 Advanced COBOL. The instructor’s goal was to use the calendar to display all course due dates and the grade center to allow students full access to their grades throughout the semester. The instructor was pleased with the results and will continue this practice for upcoming semesters.

CIS 4263 Ethics in Information Technology has undergone many changes to better facilitate student learning. During the spring semester, the course was offered online instead of in the traditional face-to-face classroom. Previously, students made presentations using PowerPoint for the chapter case studies. However, in the online class, students wrote their assessment of the chapter case and submitted
responses in the Discussion Board. The instructor then required students to respond to two classmates’ case studies. In addition, students researched a current event article relevant to Ethics in IT and copied this article in a Discussion Thread and their opinion of the article. Students also replied to two other student articles throughout the semester. The format worked better than expected, with thoughtful and stimulating conversations happening among classmates. The instructor plans to use Kaltura for students to video their PowerPoint presentation with a picture-in-picture (PIP) of themselves in the PowerPoint giving the presentation for the fall semester.

To address retention within the major, CIS faculty will discuss the creation of a freshman mentoring program during the 2014 Professional Development Week. Early plans are to assign a senior mentor to a freshman student to help guide them and give advice during the program. Graduating students have commented that they wish they had paid more attention to their GPA, saved their course notes, or started looking for a job sooner. Faculty hope that hearing these hints from a fellow student who has “been there, done that” will benefit younger students.

8. How do you ensure shared responsibility for student learning and assessment among students, faculty and other stakeholders?

Students are given the opportunity to evaluate courses near the end of the semester. The compiled results are distributed to instructors to disseminate and adjust their courses as necessary. While this is an important outlet for students to discuss and evaluate a course and instructor, there are other opportunities for students to assess.

Group work is an important component of many CIS courses. In CIS 4623 Database Management System, students evaluate teammates on their participation level. These peer evaluations are linked to a student’s course grade. The goal is to encourage students to participate in the work, instead of allowing a few to carry the burden of many. Since students are more likely to actively participate, they are better able to practice the skills of the course, thus improving their student learning. CIS 3523 System Analysis & Design requires students to evaluate their peers during presentations. These peer evaluations are intended to improve their classmates’ communications skills, in addition to strengthening their own by observing other presentations.

The CIS senior exit survey (Appendix F) is administered at the end of each semester to students completing the capstone course of the major, CIS 4634 Application Software Development Project. One of the requirements of the course is to complete the survey, giving faculty feedback and valuable perceptions of their time at UAM.

Faculty discussed the results of the alumni and exit surveys, as well as informal observations, during department meetings (Appendix E). From these meetings, faculty brainstorm potential curriculum changes and teaching techniques. After observing that SLO 5 (knowledge of communication skills) scored only a good/average rating from the 2011 senior exit survey, faculty agreed to place more emphasis on proper communication skills over the next year. The 2012 and 2013 surveyed resulted in an
excellent rating of SLO 5. Faculty will continue to emphasize email communication with students, enforcing a need for subject lines, capitalization, and complete sentences.

9. **Describe and provide evidence of efforts your unit is making to recruit/retain/graduate students in your unit/at the University.**

Recruiting can never begin too early in a young person’s life; a class of kindergarteners from Monticello School District visited UAM in December 2013, to learn more about computers and UAM. Five CIS majors and two faculty members hosted the students in the Babin Business Center computer labs 102 and 122, taking the opportunity to introduce them to UAM and the School of CIS, while teaching them about computers by helping them to each create PowerPoint presentations (Appendix J). The department plans to continue this event.

Communication is crucial to recruiting and retaining students within any program. Potential students of the School of CIS receive a letter from Dean Hairston and a department brochure. These names are generated from the Admissions Office, Scholar’s Day, Weevil Welcome Day, or the CIS website. Appendix C contains letters for those who are interested in a major, minor, or advanced certificate in Computer Information Systems. Appendix D contains the recruitment brochure.

The School of CIS faculty has participated in judging for the Southeast Arkansas Regional Science Fair for the past several years. In 2014, three CIS faculty judged the Computer Science and the Environmental Sciences categories, exposing faculty to the area’s brightest high school students.

Once a student becomes a CIS major, an advisor sends a hand-written note welcoming the student to the major and encouraging him/her to stop by with questions or concerns. Some advisors also send birthday cards to advisees as another opportunity to connect and open the lines of communication. CIS faculty participates in the annual UAM Parents/Family Day each fall, offering an occasion for instructors to connect with students and meet their families, in hopes of strengthening the student-faculty bond.

The School of CIS also works to offer required courses, as well as electives, on flexible scheduling. Courses have been offered online, as a hybrid, in the afternoon, at night, and on the Colleges of Technology campuses (Appendix K). Students appreciate the flexibility and often fill the classes. Faculty strives to balance traditional classroom settings and scheduling with non-traditional course delivery and will continue to offer a variety of scheduling options for students as they complete a CIS major, minor, or advanced certificate.

The School of CIS sponsored CIS Alumni Day in March 2014, inviting graduates to speak to classes about their careers, how they got there, and how their CIS courses helped prepare them. Many also spoke about the interview process. Graduates came from Entergy, FIS Global, Murphy Oil, and many others. The goal of the event continues to be to enlighten students on possible career paths and employers. An email was sent to all UAM students to invite them to learn more about careers in the IS/IT fields. See Appendix I for the programs, including a job description of each speaker. The department received
positive feedback from the students on the presentations and plans to continue hosting a similar event each spring.

The School of CIS sponsors a student organization, Chi Iota Sigma. Membership gives students a vested interest in their chosen field of study and is available to any UAM CIS major or minor. The club is seen as a good retention tool, but it also helps faculty to better know students who become involved, thus strengthening the faculty-student bond. During the monthly meetings, students are fed and plan the year’s activities. The organization sponsors philanthropic activities such as fall and spring canned food drives and an Angel Tree Christmas toy drive. Students also participate in field trips to area businesses that hire UAM CIS graduates. Previous industry tours have included trips to Entergy (Pine Bluff), Acxiom (Conway), Windstream (Little Rock), Dillards (Little Rock), JRMC (Pine Bluff), and FIS (Little Rock). In 2014, students and club sponsors traveled to Murphy Oil (El Dorado).

Food may be an unconventional retention tool, but it is another opportunity to bond with students, hoping to encourage them to complete their degrees. The School of CIS has been sponsoring an annual Christmas Buffet of Sweets for all students taking CIS classes for several years. As a symbol of congratulations to graduating seniors, the department also hosts a graduation dinner following commencement rehearsal each year. This is an opportunity to wish them well and encourage them to remain in touch via email, phone calls, or by joining the UAM CIS Alumni page on Facebook.

Each semester, the School of CIS employs a CIS major in good standing as a lab assistant to work five evenings a week so that a lab in the Babin Business Center can be available for students after the campus closes. The expectation is that students will use the lab to do homework and practice their skills, thus performing better in their courses. The School hopes this job also encourages the CIS major hired to remain at UAM and complete his/her degree.

The School of CIS recognizes student achievement each spring semester by hosting an awards reception, in which all nominated students are encouraged to attend and invite guests. The faculty takes this opportunity to publicly recognize academic success of CIS majors by awarding certificates and scholarships. The department awards an Outstanding Senior of the Year, Outstanding Junior of the Year, and an Outstanding Rookie of the Year, whose names remain on perpetual plaques outside the department’s office. Students also received $8,862 in scholarships for the 2013-14 academic year. See Appendix L for a breakdown of scholarships awarded.
Appendix A

Student Learning Outcomes

School of Computer Information Systems
CIS Assessment Analysis
2013-14

Student Learning Outcome:

Practical knowledge of various productivity software packages

Assessment Statement:

Students’ ability to efficiently use Microsoft Office 2010.

Skills Assessed:

This will be accomplished through various assignments using Microsoft Windows 7 Operating System, Microsoft Internet Explorer 10.0, Microsoft Word 2010, Microsoft Excel 2010 and Microsoft PowerPoint 2010. The technical aspects of each package comprise the core of the learning experience; students are also exposed to many managerial concerns and the resulting impact on the business environment. A large number of hands-on assignments are given as homework and as in-class tasks. Individual instructor prerogative dictates the frequency and type of exams/quizzes.

Course(s) in which conducted:

CIS 2223 Microcomputer Applications

Description of findings:

Reading comprehension deficiencies are apparent as the complexity of the software increases. Mathematics deficiencies surface most commonly when spreadsheet software is being taught. Otherwise, students seem to naturally gravitate toward microcomputer-based tasks in the software packages that they are familiar with such as Internet Explorer, Word, and PowerPoint. A prerequisite of ENGL Composition I and co-requisite of Intermediate Algebra to CIS 2223 were added during the Fall 2010 semester to ensure that the students are better prepared for taking the course. Indications that students are better prepared for the course since the prerequisites have been added; however, students are taking the course without proper prerequisites due to different general education requirements at the COTs.
CIS Assessment Analysis  
2013-2014

Student Learning Outcome:

Practical knowledge of various programming languages

Assessment Statement:

Students’ ability to develop logical and working solutions utilizing various programming languages, data file usage, flowcharts, pseudocode, structure charts, printer spacing charts, and/or IPO charts.

Skills Assessed:

This will be accomplished through various assignments that seek to demonstrate any number of standard programming concepts. Each assignment should gradually build upon previous work. Students should be able to develop logical solutions via tools such as flowcharts, pseudocode, structure charts, printer spacing charts, and/or IPO charts utilizing the software package Microsoft® Visio. From these designs the students write the appropriate code to solve the problem using correct syntax which has been stressed in class lecture and with sample programs. Students are required to have a sufficient background in the construction of data files and/or usage of existing data files on each program assignment. Students will utilize various debugging techniques to ensure compilation, linkage, and execution. Although documentation is an ongoing process, students should understand its importance and ensure that all coded modules are easily maintainable.

Course(s) in which conducted:

   CIS 3423 COBOL  
CIS 3443 Object-Oriented Programming Languages

Description of findings:

COBOL:

Students are taught extensive usage of Micro Focus Net Express 5.1 programming software in order to enter, compile, link, and run program assignments. In order to facilitate students in managing their time during the planning process of the programming problem, students are asked to have various parts of the program entered before each class session begins. Exams are given periodically throughout the semester that tests their programming knowledge. Quizzes and homework are administered from each chapter to encourage students to read assignments facilitating an understanding of the concepts. The assignments require each student to construct Visual Table of Content charts using Visio; develop electronic printer spacing charts; gain knowledge concerning the manipulation of data files, in the area of sorting, table handling, searching files for specified records under sequential, random, and dynamic environments, utilizing subprograms; as well as, the entire development of a business oriented program.
Object-Oriented Programming Languages:
Because our students have a background in producing logical diagrams from their first core course in the curriculum they are comfortable with the VISIO program and are able to produce program flowcharts with relative ease. It is evident that when students take the first COBOL class before taking the OOP class, they have a better conceptual background and can then work faster and more confidently in an object environment. After completing a programming assignment, students were sometimes asked to run their applications for the instructor. Relevant questions were posed as the students “demo” their programs. This technique affords the instructor a better measurement of how well students understand the topics at hand. Many debugging strategies were employed and internal documentation (comments) was also stressed heavily.

At the end of the term, students in the CIS 3443 class are currently required to design and code an independent project which utilizes basic skills learned in the class. Upon completion of the course, students are also required to formally present their projects to the class.
CIS Assessment Analysis
2013-2014

Student Learning Outcome:

Knowledge of information systems development methods and techniques

Assessment Statement:

Student has the ability to perform the analysis (requirements gathering, modeling, etc.) and the design (input, output, database, web, error messages, etc.) necessary to build an information system.

Skills Assessed:

The student reads technical information and translates that information into practice.

In the analysis phase, the student demonstrates his/her ability to gather system requirements and appropriately use software to analyze and display the results. The student uses diagramming software to create the illustrations needed when performing various modeling techniques. In addition, database software is used to develop various elements of a data dictionary and create prototype forms.

During the design phase, the student uses the analysis information and various software applications to create different types of reports, devise a database schema, design a web site, and develop informative error messages.

The student is also assessed on their ability to produce a manual named “Book of Knowledge.” The purpose of this manual is for the student to create a repository of system analysis and design information for future use.

Course(s) in which conducted:

CIS 3523 Systems Analysis & Design

Description of findings:

The student creates an analysis manual to demonstrate his/her ability to gather system requirements, analyze those requirements, and then create modeling diagrams and documents to show how the system will work.

While the students do the mechanics of the assignment by successfully using Visio, Excel, and Access to create diagrams, charts and data, they tend not to think about what they have produced. They assume that getting the software to produce something means it is correct. I need the students to think more about obtaining the correct information than about using the software. In the future, more examples will be worked to illustrate a concept. Also, more assignments will be
done first by hand, then reviewed by me, then entered into a software package.

A design manual is where the student exhibits his/her ability to plan a database schema, determine the various types of reports needed, generate effective reports, create user-friendly GUI screens and web pages, and write informative error messages.

The design part of the class is more tangible than the analysis section. Designing the physical system also allows the student to show more of their artistic side. Students have an easier time designing the various items. No changes are planned for this area.

Subjective quizzes and written paragraphs determine if students are getting the main concepts of the course. The results show that while the students understand the major concepts presented, many do not read the chapter before the concept is taught. More written paragraphs concerning the reading assignment will be given instead of subjective quizzes where the student chooses a possible answer. Writing from scratch about the chapter may force more students to read ahead of time.

Last year, I started giving pre and post-tests. I performed a correlation of final grades to pre/post-test results and discovered there was little correlation. Based on this finding, I began giving tests over the material instead of using only manuals to assess information analysis and design knowledge. The result of this change has been successful. The post-test results correlate more positively with the student’s final grade in the class. Now the grade received by the student more accurately reflects both the knowledge of information systems development methods and techniques in addition to his/her ability to use that knowledge to produce an end product.

Most students can successfully create a Book of Knowledge. However, some have trouble understanding that some organization is needed in order to quickly locate information in the future. A few tend to place an item based on the first letter of the document rather than into a grouping of related items where it would be easier to locate. Having to know the specific title of a document might not allow you to locate that document when looking for information about a category. I will stress the need for some “method to the madness” of putting documents into the manual.
CIS Assessment Analysis
2013-2014

Student Learning Outcome:

Knowledge of data communications and local area networks

Assessment Statement:

Students’ ability to plan, create, and manage a local area network

Skills Assessed:

This course includes two forms of assessment. Most of the course grade comes from three exams administered throughout the semester. Each exam consists of both objective and subjective questions and is designed to test knowledge, as well as application of the concepts in short-answer and essay-based questions. Subjective questions must be answered in complete sentences, using an organized and straightforward manner. This method of testing strengthens critical and logical thinking, and written communication skills.

Class participation is another degree of assessment for the class. Because a portion of the course is lab work, the participation grade is based on involvement in building and troubleshooting the networks. In both lecture and lab, questions and comments related to the course topics are encouraged so that, throughout the course, the class learns from others’ experiences. The overall goal is to apply the book knowledge and classroom definitions into real-world illustrations using the client-server laboratory settings. Not paying attention in the lab and excessive tardiness and absences negatively affects the class participation grade.

Course(s) in which conducted:

CIS 4503 Data Communications & Networking

Description of findings:

Students like the opportunity to discuss exam questions. By spending time reviewing the exams, the class is encouraged to compare the correct and incorrect answers, thus reinforcing oral communication, reasoning, and logic skills. This also serves as a chance to tie previous concepts to those that will appear in upcoming chapters and to reinforce concepts before entering into new material.

This is a comprehensive course that continues to build upon its concepts. Information from early chapters is still used at the end of the semester. These topics are also applied in the computer laboratory setting. Students have a greater understanding of the course topics after they have applied their knowledge in the computer laboratory. While working individually to construct the networks, students are encouraged to share knowledge and experience, giving classmates an opportunity to employ the course concepts.
In the hands-on lab, students are not always attentive and will click through a software download without reading the instructions on the screen. The controlled laboratory setting shows the consequences of not paying attention to the messages on the computer screen, and if a student gets too far behind on their network, outside class work on the network may become necessary. Students are encouraged to work together in listening to instruction, taking notes, and learning the material. If problems arise, students must troubleshoot to find the error and can rely on their peers to assist them. Information technology (IT) departments often employee this technique of sharing information with other IT staff.
Student Learning Outcome:

Knowledge of communication skills

Assessment Statement:

Student has the ability to produce business documents such as memos, status reports, Gantt charts, manuals, cover letters and resumes and to interact both formally and informally through oral communications such as interviews and presentations.

Skills Assessed:

This assessment is accomplished using the following:

An informational memo to the instructor detailing the content of his/her system

A status report template to communicate the project’s weekly status and Gantt charts showing the deliverables and communicating graphically progress on those deliverables

A manual illustrating the analysis and design of their system containing both narrative documents and system diagrams

Programming documentation describing what the code is doing and knowledge contributions describing a problem along with the solution for an online Book of Knowledge

A system manual written from a technical viewpoint and a user documentation manual containing user-friendly, detailed information a user would need to operate the system

Two formal presentations and many one-on-one conversations with the instructor

Various job-search documents including job applications, resumes, cover letters and reference sheets

A telephone interview and a face-to-face interview

Timed paragraph writing assignments on a myriad of topics

Course(s) in which conducted:

CIS 4634 Application Software Development Project (AKA Senior Project)
Description of findings:

The students are able to complete memos, status reports, Gantt charts, the various manuals, programming documentation, knowledge contributions and perform presentations. The students demonstrate appropriate use of software applications such as Visio, Word, Excel and PowerPoint.

Documents related to the job search such as cover letters, reference sheets and resumes need work. Students use generic templates; list only some of their skills, neglect to use parallel structure and forget to spell and grammar check. While I originally intended to do two checks of the resumes, I added a third check. However, due to frequent changing of the resume by the student, the final copy may not have been checked. Faculty continues to be a great resource for additional “eyes” looking at these documents.

Incorrect grammar, whether written or spoken, is a problem for many students. I have begun to correct them when having one-on-one conversions in addition to noting grammar mistakes on the presentation rubric when the student gives a formal presentation. The timed paragraph writing, a recently added assessment tool, is another place where grammar mistakes are noted. Faculty is asked to reinforce grammar skills whenever an opportunity presents itself.

Correctly pronouncing words is another area where many students can improve. Not knowing how to correctly pronounce a word when giving a presentation is an event the student should be able to avoid. The internet has a multitude of sites that provide the correct pronunciation of words. The students should be strongly encouraged to use these sites if in doubt on how to say a word.
Appendix B

Syllabi for the following courses:

SLO 1 – CIS 2223 Microcomputer Applications
SLO 2 – CIS 2203 Programming Logic & Design & CIS 3423 COBOL
SLO 3 & 5 – CIS 4634 Advanced Software Development Project
SLO 4 – CIS 4503 Data Communications & Networking

School of Computer Information Systems
COURSE TITLE: CIS 2223 Microcomputer Applications (Equivalent to ACTS CPSI 1003 Introduction to Computers)

INSTRUCTOR: Lynn Harris

DIRECT PHONE: 870-460-1231

CIS OFFICE PHONE: 870-460-1031

OFFICE: BBC 106

EMAIL ADDRESS: harrisl@uamont.edu

CREDIT HOURS: 3 credit hours

COURSE DESCRIPTION:
The study and use of microcomputer based applications software to increase business and personal productivity. Realistic computing problems will be solved using standard software packages.

COURSE OBJECTIVES / STUDENT LEARNING OUTCOMES:
The student who successfully completes this course will be able to demonstrate knowledge of the Windows operating system
Internet connection applications and the World Wide Web
Word word-processing application
Excel spreadsheet application
PowerPoint presentation application

COREQUISITES:
ENGL 1013 (Equivalent to ACTS ENGL 1013 Composition I) OR ENGL 1033; and MATH 183 or higher-level mathematics

TEXTBOOK:
TECHNICAL SUPPORT INFORMATION:

Issues with Blackboard:
Contact Office of Academic Computing; phone 870-460-1663.
Open Monday-Friday, 8 a.m.-4:30 p.m.
Help Desk at blackboard@uamont.edu.

The computer section in the Library is open during regular Library hours. Click here to see when the Taylor Library is open: http://www.uamont.edu/library/

Issues with Email:
Contact the Office of Information Technology; phone 870-460-1820; open Monday-Friday, 8 a.m. – 4:30 p.m.

The Student Handbook for Distance Education is available at the following link: http://www.uamont.edu/AcademicComputing/

MINIMUM TECHNOLOGY REQUIREMENTS:
For minimum technology requirements, visit: http://kb.blackboard.com/pages/viewpage.action?pageId=38830689

Access to a working computer with Internet capability.
Operating System: Windows 7
Hardware: 256 MB of RAM, 1GB free hard disk space
Application Software: Microsoft Office 2010
Connection to the Internet: (broadband connection, such as RoadRunner, Satellite Internet or DSL, is preferred). Broadband connections are recommended for assessments.

FEEDBACK SCHEDULE:
Most often, a student can expect a response to email within 24 hours Monday through Thursday.

METHOD OF DELIVERING ASSIGNMENTS:
All assignments must be submitted through the Blackboard Assignment Page. Be sure to have anti-virus software installed on your computer and update it regularly.

ATTENDANCE POLICY /PARTICIPATION REQUIREMENTS:
Students are expected to log in at least three (3) days a week to Blackboard. You are expected to complete all assignments, quizzes, and exams on the dates they are due as explicitly designated in the Announcements, Assignments, and Calendar. Do NOT miss any deadlines; you will receive a zero (0).

All students are requested to obtain a UAM e-mail account. You must sign in using the UAM email or you will not receive emails from me that are directed to the entire class. If you have any questions about the course or need assistance, please contact me in person or by telephone during office hours; or by e-mail at any time.
EMERGENCY OR INTERRUPTION IN COMPUTER SERVICE POLICY:
Prepare for unexpected problems and emergencies. Understand that problems and glitches do occur in online learning as they do in any learning environment. Unless the university is without power for 2 or more days, assignments are due as posted in the assignment, announcements, and calendar. Have a back-up plan such as using the computers at a local library for submitting assignments in case your computer crashes or your service is interrupted. Don't wait until the night before an assignment is due to submit. Work ahead!

DISCUSSION:
Be sure and read each of your classmates post. Some have offered to help if you need it. Always check the Discussion Board in case you need help or check what others are saying about Assignments.

To create a post you click on Create Forum - type in the Subject and the Message

To answer a post in a Forum, you click on that Discussion Post Subject, and then click on Create Thread

ALSO - check the post you created, notice the Total Posts number which lets you know that someone has responded. Don't leave your classmates hanging.

GRADING POLICY:
There will be four (4) exams that will be worth 100 points each for a total of 400 points.

Quiz, Tutorial and Case assignments will also be graded for a total of 695 points.

Make-up exams and late homework are not accepted. Exams, quizzes and homework that are not completed by their respective deadlines will receive a zero.

GRADE ASSIGNMENT:
The total earned points (1095 possible) are accumulated, converted to a percentage, and applied to the following scale to produce the final grade.

A = 90% - 100%  
B = 80% - 89%  
C = 70% - 79%  
D = 60% - 69%  
F = 0% - 59%

The above grade assignment may be revised at the discretion of the instructor.

GRADE REPORTS:
UAM will no longer mail grade reports to all students. You may access your grades through Weevil Net on the UAM homepage, http://www.uamont.edu. To have your grades mailed to you, complete the grade request form available in the Registrar’s Office in Monticello or the Student Services offices in Crossett and McGehee.
INCOMPLETE POLICY:
A student must be current with course work assignments and/or examinations and must have completed at least 75% of all required course work assignments and/or examinations to be considered for a grade of Incomplete (I).

STUDENTS WITH DISABILITIES:
It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 121; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926; email: whitingm@uamont.edu.

STUDENT CONDUCT STATEMENT:
Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

ACADEMIC DISHONESTY:
Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
- Copying from another student’s paper;
- Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
- Collaboration with another student during the examination;
- Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
- Substituting for another person during an examination or allowing such substitutions for oneself.
Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name in on the work submitted.
Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.
For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, I reserve the right to dismiss and/or fail any student who participates in cheating. If any student is caught posting another student's work, both students will receive a zero on that assignment. If any student is caught doing this twice, that student will receive an F for the course.
COURSE OUTLINE:
August 21 – September 9
Windows 7: Exploring the Basics of Microsoft Windows 7 Tutorial
Windows 7: Managing Your Files Tutorial
Internet: Browser and Email Basics Tutorial
Exam #1 – September 11

September 12 – October 7
Word 2010: Creating a Document Tutorial
Word 2010: Editing and Formatting a Document Tutorial
Word 2010: Creating a Multiple-Page Report Tutorial
Exam #2 – October 9

October 10 – November 12
Excel 2010: Getting Started with Excel Tutorial
Excel 2010: Formatting a Workbook Tutorial
Excel 2010: Working with Formulas and Functions Tutorial
Excel 2010: Enhancing a Workbook with Charts and Graphs Tutorial
Exam #3 – November 14

November 15 – December 6
PowerPoint 2010: Creating a Presentation Tutorial
PowerPoint 2010: Adding and Modifying Text and Graphic Objects Tutorial
Exam #4 – December 9

See the calendar in Blackboard for the due dates and times for each assignment, quiz and exam.

SPECIAL DATES:
August 21: First day of classes
August 23: Last day to register or add classes
September 2: Labor Day
October 30: Last day to drop with a W
November 4-15: Preregistration for Spring 2014
November 27-29: Thanksgiving Holiday
December 6: Last day of classes
December 9: Final Exam
CIS 2203 Programming Logic & Design – 3 credit hours

Prerequisite: Enrollment in Gen Ed Mathematics

ASSOC. PROF: Lori Selby

OFFICE: BBC 108

DIRECT PHONE: 870-460-1811

CIS OFFICE PHONE: 870-460-1031

Email Address: selby@uamont.edu

OFFICE HOURS:  
MWF 9:00 – 10:00  
MW 12:00 - 1:00  

VIRTUAL OFFICE HOURS:  
TTH 9:30 – 12:00  
I will respond to emails quickly

TEXTBOOK AND MATERIALS:

COURSE OBJECTIVES
This course provides the beginning programmer with a guide to developing structured program logic. The course assumes no programming experience and does not focus on any one particular language. It introduces programming concepts, such as structure, decision-making, looping, arrays, and files, and enforces good style and logical thinking. Students will also learn object-oriented programming techniques, events, and databases.

STUDENT LEARNING OUTCOMES:
By the conclusion of the course the student should be able to:
analyse the problem; utilize logical sequencing using hierarchy charts, and program flowcharts; printer/monitor spacing charts for report writing; and to code the problems using concepts taught in class/text utilizing pseudocode to display their ability to logically solve word problems.
COURSE ASSIGNMENTS:
There will be program assignments from each chapter designed to test the students' ability regarding each new concept. The student will turn in a printer spacing chart of the output, a flowchart using Microsoft VISIO, and the pseudocode listing for each assignment for a total of 45 points. Late assignments will not be accepted, however, hand in whatever you have completed for partial credit. Students are expected to complete all assignments on time. The instructor does NOT guarantee make-up assignments or credit for work that is turned in late.

GRADING AND EVALUATION CRITERIA

Exams ........................................ 400

Exam I - Ch 1 – 2
Exam II - Ch 3 – 4
Exam III - Ch 5 – 6
Exam IV - Ch 7
Final - Ch 1-7 Friday, May 2, 1:30 – 3:30

Note: The final is optional and if taken will replace your lowest test score

Program Assignments....... 140
Quizzes/Assignments......... 170
Attendance ...................... 100
-------------------------------
Total Available ............... 810

EXAMINATIONS:
There will be four to five examinations worth 100 points each.
Should it be necessary to miss an exam due to an emergency or illness, the professor should be notified within 24 hours of the missed exam, call 460-1031 or 460-1811. The student will be expected to take the exam the day that he/she returns and there may be a 10% penalty on the exam.

Quizzes missed due to unexcused absence will not be made up.

GRADES:
The following table is based on total percentage points accumulated, and will be used to assign final course grades:
GRADE REPORTS:
UAM will no longer mail grade reports to all students. You may access your grades through Weevil.Net on the UAM homepage, http://www.uamont.edu. To have your grades mailed to you, complete the grade request form available in the Registrar’s Office in Monticello or the Student Services offices in Crossett and McGehee.

INCOMPLETE POLICY:
A student must be current with course work assignments and/or examinations and must have completed at least 75% of all required course work assignments and/or examinations to be considered for a grade of Incomplete (I).

ATTENDANCE:

Regular and timely attendance is expected. In addition to lectures, attendance is expected at all scheduled programming lab days. Students not attending the lab days will receive a 5 point deduction for each missed class on the assigned program assignment. There will be an attendance grade of 50 points for the semester. Cell phones should be turned to SILENT before entering classroom. Student should never be working on other assignments/computer work while in the classroom.

STUDENT CONDUCT:

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically. All students are required to comply with the requirements of the Student Conduct Code as specified in the Student Handbook. The handbook which includes the conduct code is available online at: http://www.uamont.edu/pdf/Student Handbook.pdf.

ACADEMIC DISHONESTY:

Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
Copying from another student’s paper;
Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
Collaboration with another student during the examination;
Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
Substituting for another person during an examination or allowing such substitutions for oneself.

Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

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For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be dismissal and/or failure by any student who participates in cheating.

PARTICIPATION:
100% participation of all class work completed and turned in on time -- will result in a passing grade for the student.

STUDENTS WITH DISABILITIES:
It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University's commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 121; phone 870 460-1026; TDD 870 460-1626; fax 870 460-1926; email: whitingm@uamont.edu.

E-MAIL
All students are requested to obtain a UAM e-mail account. If you have any questions about the course or need assistance, please contact me in person or by telephone during office hours; or by e-mail at any time.

SPECIAL DATES:

January 20      MLK Day
March 24-28    Spring Break
March 19      Last Day to withdraw with a W
April 29      Last day of classes
# 15-Week Course Outline

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<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter Readings</th>
<th>Exams</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to course</td>
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<tr>
<td>2</td>
<td>An Overview of Computers and Logic</td>
<td>Chapter 1</td>
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<td>3</td>
<td>Working with Data, Creating Modules, and Designing High-Quality Programs</td>
<td>Chapter 2</td>
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<td>4</td>
<td>Exams 1-2</td>
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<td>5</td>
<td>Understanding Structure</td>
<td>Chapter 3</td>
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<td>6</td>
<td>Making Decisions</td>
<td>Chapter 4</td>
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<td>7</td>
<td>Exams 3-4</td>
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<td>8</td>
<td>Looping</td>
<td>Chapter 5</td>
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<td>9</td>
<td>Arrays</td>
<td>Chapter 6</td>
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<td>10</td>
<td>Exams 5-6</td>
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<tr>
<td>11</td>
<td>File Handling and Applications</td>
<td>Chapter 7</td>
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<tr>
<td>12</td>
<td>Exams 7</td>
<td></td>
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<tr>
<td>FINAL</td>
<td>Friday, May 2, 1:30 – 3:30</td>
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</tbody>
</table>
CIS 3423 COBOL – 3 credit hours

PREREQUISITES: General Education Mathematics, minimum "C" in CIS 2203

ASSOC. PROF: Lori Selby

OFFICE: BBC 108

DIRECT PHONE: 870-460-1811

CIS OFFICE PHONE: 870-460-1031

Email Address: selby@uamont.edu

OFFICE HOURS: VIRTUAL OFFICE HOURS:
MWF 9:00 – 10:00 TTH 9:30 – 12:00
MW 12:00 - 1:00 I will respond to emails quickly

REQUIRED TEXT AND MATERIAL:
COBOL for the 21st Century; Stern/Stern/Ley, 11th Edition, Wiley Publishing,
ISBN: 0-471-72261-8

COURSE OBJECTIVES:
A major objective of this course is to provide students with an in-depth knowledge of proper structured software development techniques, and competence in their application using the COBOL language. Both batch and interactive processing environments will be studied with an emphasis on file maintenance activities and the development of programs to perform them. Students will utilize the MicroFocus COBOL to: 1) compile, link, execute, and 2) use of editorial commands to copy, move and delete statements. Students will be able to code on mainframes, minis, and microcomputers using the COBOL compiler emphasized in this course. The student is assessed on her/his ability to construct algorithms, develop printer/monitor spacing charts for report writing, code the applications, and properly document solutions to facilitate future maintenance.
STUDENT LEARNING OUTCOMES:

By the conclusion of the course the student should be able to: develop logical solutions via tools such as flowcharts, structure charts, printer spacing charts, and/or IPO charts utilizing the software package Microsoft® Visio. From these designs the students will be able to write the appropriate code to solve the problem using correct syntax which has been stressed in class lecture and with sample programs. Students will exhibit a sufficient background in the construction of data files and/or usage of existing data files on each program assignment. Students will be able to utilize various debugging techniques to ensure compilation, linkage, and execution. Although documentation is an on-going process, students will understand its importance and ensure that all coded modules are easily maintainable.

COURSE ASSIGNMENTS:

There will be program assignments from each chapter designed to test the students' ability regarding each new concept. The student will turn in a structure chart using Microsoft VISIO, a program listing and the program output for each assignment for a total of 50 points. Late assignments will not be accepted, however, hand in whatever you have completed for partial credit. Students are expected to complete all assignments on time. The instructor does NOT guarantee make-up assignments or credit for work that is turned in late.

GRADING AND EVALUATION CRITERIA

Exams .................................... 80%

Exam I - Ch 1 - 3

Exam II - Ch 4 – 5

Exam III - Ch 6 – 7

Final - Ch 8 - 9 Thursday, Dec 12th, 1:30 – 3:30

Program Assignments....... 10%
Quizzes/Assignments....... 10%

-----------------------------------------------
Total Available .................100%

EXAMINATIONS:

There will be three examinations worth 100 points each.

Should it be necessary to miss an exam due to an emergency or illness, the professor should be notified within 24 hours of the missed exam, call 460-1031 or 460-1811. The student will be expected to take the exam the day that he/she returns and there may be a 10% penalty on the exam.
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GRADES:
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<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>90% - 100%</td>
<td>A</td>
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<tr>
<td>80% - 89%</td>
<td>B</td>
</tr>
<tr>
<td>70% - 79%</td>
<td>C</td>
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<tr>
<td>60% - 69%</td>
<td>D</td>
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<tr>
<td>Below 60%</td>
<td>F</td>
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Dec 6  Last day of classes
Dec 12  Final 1:30 – 3:30

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<td>3</td>
<td>PC COBOL</td>
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<td>4</td>
<td>IDENTIFICATION and ENVIRONMENT DIVISION</td>
<td>Chapter 2</td>
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<td>5</td>
<td>DATA DIVISION</td>
<td>Chapter 3</td>
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<td>Exam 1-3</td>
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<td>7</td>
<td>PROCEDURE DIVISION</td>
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<td>9</td>
<td>Design and Debug</td>
<td>Chapter 5</td>
<td>Exam 4-5</td>
</tr>
<tr>
<td>10</td>
<td>Moving, Printing, and Displaying</td>
<td>Chapter 6</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Arithmetic Verbs</td>
<td>Chapter 7</td>
<td>Exam 6-7</td>
</tr>
<tr>
<td>13</td>
<td>Decision Making</td>
<td>Chapter 8</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>15</td>
<td>Iteration</td>
<td>Chapter 9</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Thursday, Dec 12th, 1:30 – 3:30</td>
<td></td>
<td>Exam 8-9</td>
</tr>
</tbody>
</table>
University of Arkansas at Monticello  
School of Computer Information Systems  
CIS 4634 – Application Software Development Project Course Syllabus – 4 hours credit  
Spring 2014 – MWF 8:00

Instructor:  
Angela Marsh

Office:  
BBC Room 118

Phone:  
Direct – 870.460.1341  
CIS Office – 870.460.1031

Email:  
marsh@uamont.edu

Office Hours:  
10:00 a.m. – 12:00 p.m.  MW  
9:30 a.m. – 11:00 a.m.  TT  
12:30 p.m. – 1:30 p.m.  TT  
Other hours by appointment

Web Site:  
http://www.uamont.edu/FacultyWeb/Marsh/

Course Title & Credit Hours:  
CIS4634 Application Software Development Project – 4 hours credit

Course Description:  
System simulation techniques; their application to business systems using an appropriate  
simulation language; systems design and development; extensive use of computers.

Course Prerequisite:  
CIS 3523 Systems Analysis and Design and CIS 4623 Database Management Systems

Course Text:  
None

Supplemental Materials:  
Each student should have at least two memory devices to process, store, and backup data.  
Students will also need a three-ring binder and section dividers for documentation manuals.

Student Learning Outcomes:  
The student who successfully completes this course will analyze, design, code, test, document,  
and present an information system, obtain experiences which better enable the student to enter the job  
force with confidence, and demonstrate higher-level communication skills.

Attendance:  
Students are expected to meet weekly with the instructor for system updates. On Wednesdays,  
students are expected in class dressed in business casual attire.

Course Content:  
System Analysis and Design - An investigation identifying the nature and scope of the system. Used to  
determine and document not only what input, processing, output, and testing is needed but also how  
best to construct the system to satisfy those needs. A manual will be created and a presentation given at  
the end of this phase.

Development - The point where the project is actually developed. Code is written, internally  
documented, and tested. A working project will be produced in this phase.
**Documentation**—Both a system manual and a user manual are created. The two manuals should be submitted in one physical manual. Your working system on a storage device should also be included with this documentation.

**Project Presentation** - An oral presentation of your system is given. A hard copy of the presentation is submitted.

**Status Reporting** – Weekly reporting on the status of your project.

**Communication Assignments** – Assignments designed to enhance the student’s professional communication skills.

**Knowledge Contributions** – Relevant knowledge shared with the class which can be viewed via the Book of Knowledge links from the instructor’s web site. For credit, all contributions must be received by the final day of the Development Phase.

**Written Paragraph** – Hand-written paragraphs on a topic provided by the instructor.

**Course Calendar and Guidelines for System Deliverables**

**Systems Analysis and Design**

**Contents**

Project Scope & Requirements Gathering

Documents describing your project scope, audience, requirements and goals.

A system narrative will also be created.

System Analysis

System modeling diagrams (DFD - Context Diagram, DFD - Diagram 0, Use Case Diagram and Scenario System Flowchart) or Sketches along with Technical Specifications including information such as languages, software and/or platforms.

System Design

Documents detailing the input, processing, and output of your project. Any test plans and/or error conditions should also be noted.

**Evaluation Criteria**

Clarity

Contents

Organization

Presentation

**Deliverables with Due Dates**

**Week 1 – January 13**

Project Scope & Requirements Gathering documents

**Week 2 – January 20**

System Analysis documents

**Week 3 – January 27**

System Design documents

**Week 4 – February 3**

System Design documents continued

**Week 5 – February 10**

System Design documents continued

**Week 6 – February 17**

System Analysis and Design Manual

NOTE: The manuals in the office are the finished product, not the Systems Analysis and Design Manual

Project Presentation & Hard Copy

**Development**

**Contents**
For PC-based Applications - Minimum
Two files/databases/tables (you should be able to create, read, update, and delete [CRUD] all data fields and/or records)
Extensive use of one programming language (programmer-generated internal program documentation is expected)
A password system
A GUI allowing user-friendly navigation and appropriate access of your system
One detail report, one summary report, and one exception report
One web page showing basic information about your system published to the Internet. The web page should contain at least your system name and logo, a hypertext link, a graphic, and text.

For Mobile-based Applications - Minimum
Two graphic, data and/or audio files
At least two buttons
Extensive use of one programming language (programmer-generated internal program documentation is expected)
A GUI allowing user-friendly navigation and appropriate access of your system

Evaluation Criteria
System Design
User Friendliness
System Performance
Internal Program Documentation
Extras
Special Note – If your system correctly performs the minimum contents listed above, the equivalent of 80% (B) or 16/20 points will be awarded. To earn more points, additional technical features will be required. To verify an extra is sufficient to earn a point, check with your instructor.

Deliverables with Due Dates
Week 7 – February 24
Menu and Password OR Software and Data Acquisition
Week 8 – March 3
CRUD programming OR Coding & Testing
Week 9 – March 10
CRUD working OR Coding & Testing
Week 10 – March 17
Reports working OR Coding & Testing
Week 11 – March 31
Web page working OR Coding & Testing
Week 12 – April 7
Testing & Preliminary Presentation
Week 13 – April 14
One-on-one system presentation to instructor
Knowledge Contribution deadline

Implementation & Documentation
Contents
System Manual - Written with the computer programmer in mind and containing minimally the following information:
Table of Contents
Project Scope documents
Analysis documents
Technical Specifications documents
Design documents
Testing documents
Development Section
Program narrative
Sample program output
Program hard copy
Copy of system on appropriate media
User Manual - Written with the end user of your system in mind. Your approach should be user-friendly and detailed.

**PC-Based System**
Table of Contents
System Narrative
Screen Section
Screen narrative
Sample screen
Screen field identifications and definitions
Error messages and corrections
Report Section
Report narrative
Sample report
Report printing procedure
Web Section
Web narrative
Sample web page
Balancing Procedures (if applicable)

**Mobile App**
Table of Contents
Short App Store description
“See More” App Store narrative

**Evaluation Criteria**
Contents
User Friendliness
Organization
Presentation

**Deliverables with Due Dates**
**Week 14 – April 21**
System Manual and User Manual - rough draft

**Week 15 – April 28 (by last day of classes)**
System Manual and User Manual – Both manuals physically reside in one notebook along with your system on a storage device

**System Presentation**
Contents
Oral presentation of your system
Project name, logo
Project description (bullets)
Two (2) screen shots which illustrate your design
Two (2) things in your system of which you are proudest
Two (2) things that you learned about yourself
Hard copy of presentation

**Evaluation Criteria**
Contents
Organization
Clarity
Grammar
Presentation

**Deliverables with Due Dates**
**Thursday, May 1, 1:30 – 3:30, Finals Week**
Formal system presentation
Presentation hard copy

**Status Reporting (includes Weekly Attendance and System Deliverables)**

**Contents**
Electronic Status – submitted via email by midnight on Sunday
Excel Status Report
Cover Page (indicate week number)
Scores along with current class percentage
Class Log – detail of all time spent on this class
Task
Notes/Thoughts (this is very important and should be detailed)
Gantt Chart
Weekly Attendance in business casual attire
System Deliverable presentation

**Evaluation Criteria**
Design
Contents
Clarity
Grammar
Presentation
Attendance
Appearance

**Deliverable with Due Dates**
**Due Weekly**
**Starting Week 1**
**Ending Week 12**

**Communication Assignments**

**Contents**
Deliverables
Knowledge Contributions

**Evaluation Criteria**
Contents
Organization
Clarity
Grammar
Presentation
Deliverables with Due Dates – Wednesday of the Week

Week 1
UAM Employment Application

Week 2
Resume & Reference Sheet v.1

Week 3
Resume & Reference Sheet v.2

Week 4
Resume & Reference Sheet v.3
   Cover Letter v.1

Week 5
   Cover Letter v.2

Week 7
   Personality Tests

Week 8
   Interview Answers

Week 9
   Behavioral Interview Answers

Week 10
   Phone Interview Notes

Week 12
   In-Person Interview Notes

Written Paragraph
Contents
Hand-written paragraph on a topic provided by the instructor
Timed

Evaluation Criteria
Contents
Clarity
Grammar
Legibility

Deliverable with Due Dates
Random times during the semester

Grading Policy:
1. The grade will be awarded based on the extent to which the student is able to accomplish deliverables and produce a quality product. All deliverables must be completed to successfully complete this course. The following table explains the scoring.

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAM Application for Employment - Handwritten</td>
<td>5</td>
</tr>
<tr>
<td>Resume &amp; Reference Sheet v.1</td>
<td>5</td>
</tr>
<tr>
<td>Resume &amp; Reference Sheet v.2</td>
<td>5</td>
</tr>
<tr>
<td>Resume &amp; Reference Sheet v.3</td>
<td>5</td>
</tr>
<tr>
<td>Cover Letter v.1</td>
<td>5</td>
</tr>
<tr>
<td>Cover Letter v.2</td>
<td>5</td>
</tr>
<tr>
<td>SAD Manual</td>
<td>15</td>
</tr>
<tr>
<td>Presentation &amp; Hard Copy</td>
<td>10</td>
</tr>
</tbody>
</table>
Your total earned points are accumulated, converted to a percentage, and applied to the following scale to produce your final grade.

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myers Briggs &amp; two other personality tests</td>
<td>5</td>
</tr>
<tr>
<td>Interview Answers</td>
<td>5</td>
</tr>
<tr>
<td>Behavioral Interview Answers</td>
<td>5</td>
</tr>
<tr>
<td>Phone Interview Notes</td>
<td>5</td>
</tr>
<tr>
<td>In-Person Interview Notes</td>
<td>5</td>
</tr>
<tr>
<td>Project Demonstration</td>
<td>20</td>
</tr>
<tr>
<td>Knowledge Contributions</td>
<td>5</td>
</tr>
<tr>
<td>Documentation Hard Copy</td>
<td>15</td>
</tr>
<tr>
<td>Pre/Post Test Evaluation</td>
<td>5</td>
</tr>
<tr>
<td>Final Presentation Hard Copy</td>
<td>10</td>
</tr>
<tr>
<td>Weekly Status – 12 Weeks @ 5 points each</td>
<td>60</td>
</tr>
<tr>
<td>Written Paragraph – 6 Weeks @ 5 points each</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>225</strong></td>
</tr>
</tbody>
</table>

Your total earned points are accumulated, converted to a percentage, and applied to the following scale to produce your final grade.

A = 90% - 100%
B = 80% - 89%
C = 70% - 79%
D = 60% - 69%
F = 0% - 59%

2. Late work is defined as work presented to the instructor after the end of the week of the assignment’s due date and will carry a 10% penalty.
3. Academic dishonesty is not tolerated. Do you own work. Cheating, collusion, duplicity, or plagiarism will result in a grade of zero for all involved.
4. A student must be current with course work assignments and/or examinations and must have completed at least 75% of all required course work assignments and/or examinations to be considered for a grade of Incomplete (I).

**Special Dates of Concern:**
January 20.............................Martin Luther King Holiday
February 21............................Deadline to file for graduation
March 19...............................Last day to drop
March 24 - 28..........................Spring Break
April 29...............................Last day of classes
April 30 – May 6......................Final exams

**Students with Disabilities:**
It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 121; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926. For assistance on a College of Technology campus contact:
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.
Student Conduct Statement:
Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic Dishonesty:
Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
  - Copying from another student’s paper;
  - Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
  - Collaboration with another student during the examination;
  - Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
  - Substituting for another person during an examination or allowing such substitutions for oneself.
Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be a zero for all concerned.
Instructor Information
Terri Cossey
Babin Business Center Room 113
cossey@uamont.edu
(870) 460-1541

Office Hours
MW 8:30-9am, 10-11am, 12-1pm, 2:30-3:30pm
F 8:30-9am, 10-11am, 12-1:30pm
**Other hours by appointment**

Course Objective/Student Learning Outcomes
This 3-credit hour course is intended to provide a strong introduction to both communications and networking for those desiring a career in computers. After successfully completing this course, students will be able to:

- Understand data communications
- Demonstrate knowledge of networks
- Display ability to configure a server-client network

Course Prerequisite
Students must have successfully completed COBOL or Object-Oriented Programming.

Required Text and Materials

Course Policies
Attendance
Students are expected to attend all classes. Students are responsible for notifying the instructor of their late arrival to avoid incurring an absence. It is the student's responsibility to inform the instructor of any excused absences prior to the missed class.
A student must make a concerted effort to complete this course. To be considered for a grade of incomplete (I), a student must be current with course work assignments and/or examinations and must have completed at least 75% of all required course work assignments and/or examinations. Attendance will be turned in to the Financial Aid Office and/or Academic Affairs Office upon request.

Grading Policy
There will be three (3) exams, including the final, throughout the course. Each exam will be worth 100 points. Assignments, quizzes, and class participation will total up to 100 points. The possible points are accumulated, averaged, and applied to produce the final grade:

- A = 90% - 100%
- B = 80% - 89%
- C = 70% - 79%
- D = 60% - 69%
- F = 0% - 59%

The above grade assignment may be revised at the discretion of the instructor.

Make-up exams are not guaranteed. Every effort should be made to notify the instructor before the exam, if the exam is missed. The instructor must be notified within 24 hours of the scheduled exam. Failure to meet this deadline will result in a grade of zero being assigned for the exam. Any make-up exam allowed will carry a 10% penalty and will be given and scored at the convenience of the professor.

Late work will not be accepted. Cheating will not be tolerated. Please reference “Academic Dishonesty” found below for more information.

NOTE: All personal electronic devices should be silenced and stored away during class. A device that is used to send/receive messages or rings during class will result in a penalty of 5 participation points. An answered call results in a 10-point penalty and dismissal from class for the day.

Test Schedule
The instructor reserves the right to modify the schedule, if the need arises.

- Exam 1 – Chapters 1-5
- Exam 2 – Chapters 6-8
- Final – Chapters 1-8, 10, 12 and Lab
Special Dates
September 2 – Labor Day Holiday (no classes)
October 30 – Last day to drop with a “W”
November 27-29 – Thanksgiving Holiday (no classes)
December 6 – Last day of classes
December 10 – Final Exam 8am-10am

Students with Disabilities
It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any approved accommodations at the beginning of the course. Any student with questions regarding accommodations should contact the Office of Special Student Services located in Harris Hall room 120, phone 870-460-1026, TDD 870-460-1626, fax 870-460-1926.

Academic Dishonesty
Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
- Copying from another student’s paper;
- Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
- Collaboration with another student during the examination;
- Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
- Substituting for another person during an examination or allowing such substitutions for oneself.
Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered, whether it be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will result in a grade of zero for all persons involved on the assignment on the first offense, and you forfeit
all bonus point opportunities that may be offered. If you are caught cheating a second time, you will be assigned a grade of “F” for the course, in accordance with the Student Handbook.

**Student Conduct Code**

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.
Appendix C

Sample Letters to Prospective Students interested in the following:

CIS Major
CIS Minor
CIS Advanced Certificate

School of Computer Information Systems
July 10, 2013

Dear «Salutation»:

Thank you for your recent request for information concerning the Computer Information Systems program at the University of Arkansas at Monticello.

Enclosed is a brochure describing the program and an information sheet with a list of degree requirements for the Bachelor of Science degree in Computer Information Systems. Graduates of the Computer Information Systems program will be expected to demonstrate:

Practical knowledge of various productivity software packages
Practical knowledge of various programming languages
Knowledge of information systems development methods and techniques
Knowledge of data communications and local area networks
Strong communication skills

We hope you will find this information helpful. In addition, we would like to invite you to our campus by calling the Office of Admissions at (870) 460-1026 for a scheduled tour.

The faculty and staff look forward to assisting you with your educational planning. If you have any further questions, please feel free to contact me at (870) 460-1538 or come by my office in the Babin Business Center room 111.

Sincerely,

Brian W. Hairston, Dean
School of Computer Information Systems

BWH:kj

Enclosures
August 22, 2014

Dear «Salutation»:

Thank you for your recent request for information concerning the Computer Information Systems program at the University of Arkansas at Monticello.

Enclosed is a brochure describing the program and an information sheet with a list of requirements for a minor in Computer Information Systems. We hope you will find this information helpful. In addition, we would like to invite you to our campus by calling the Office of Admissions at (870) 460-1026 for a scheduled tour.

The faculty and staff look forward to assisting you with your educational planning. If you have any further questions, please feel free to contact me at (870) 460-1538 or come by my office in the Babin Business Center room 111.

Sincerely,

Brian W. Hairston, Dean
School of Computer Information Systems

BWH:kj

Enclosures
August 22, 2014

Dear «Salutation»:

Thank you for your recent request for information concerning the Computer Information Systems Advanced Certificate program at the University of Arkansas at Monticello.

Enclosed is a brochure describing the School of Computer Information Systems and an information sheet with a list of requirements for the Advanced Certificate in Computer Information Systems. We hope you will find this information helpful. In addition, we would like to invite you to our campus by calling the Office of Admissions at (870) 460-1026 for a scheduled tour.

The faculty and staff look forward to assisting you with your educational planning. If you have any further questions, please feel free to contact me at (870) 460-1538 or come by my office in the Babin Business Center room 111.

Sincerely,

Brian W. Hairston, Dean
School of Computer Information Systems

BWH:kj

Enclosures
Appendix D

Current Brochure

School of Computer Information Systems
unlimited opportunities

Why should you choose a career in computer information systems?

Well, how about the field’s nearly unlimited employment opportunities and starting salaries ranging from $30,000 to as much as $50,000 a year with a bachelor’s degree?

Yes, those numbers are correct, and they’re only going to go up in the future. Computers and information technology are no longer the wave of the future – they’re here, NOW!

The Division of Computer Information Systems (CIS) is a stand-alone academic unit devoted solely to preparing students to shape the complex computer hardware and software environment of the future.

what we offer

The Division of Computer Information Systems offers the Bachelor of Science Degree in Computer Information Systems, a CIS minor, and an Advanced Certificate Program. As part of our program, you will receive Microsoft software through the Academic Alliance Program. Course offerings include instruction in the following:

- Word
- Visual Basic
- e-Commerce
- C++
- SQL Server
- Software Development
- PowerPoint
- Excel
- Access
- COBOL
- Networking
- WWW programming

For detailed course and program requirements, visit our website at www.uamont.edu/cis.

Our academic program, with its emphasis on business and communication skills, will allow you to advance in the complex business environment of the future.
future. Our faculty emphasize problem solving, team concepts, time management, and verbal/written communication skills that will make you a valuable asset to any employer.

your choice of careers

A bachelor's degree in Computer Information Systems opens a wide range of career opportunities for our graduates. You may choose to be a:

- Computer Programmer, designing and modifying software to be used by business and industry;
- Business and Systems Analyst, implementing computer systems for large companies or small businesses to make their operations more profitable;
- Database Administrator, building and managing databases for business and industry;
- Computer Support Specialist, solving problems and using your communication skills to work with managers;
- Network Manager, building and managing networks for business and industry;
- Web Design and e-Commerce, designing web pages for business and industry with expertise in data entry forms for client data base files.

it pays

A career in computer information systems not only pays well once you graduate, but it also eases the burden of paying for your college education. Thanks to action by the Arkansas General Assembly, students majoring in CIS may have as much as $10,000 in college loans paid for by the state. If you graduate with a

why UAM?

Because we offer state-of-the-art technology and a personal touch you won't find at larger universities! Our computer laboratories are constantly updated to keep UAM at the forefront of changing technology. But a quality education is more than high-tech equipment. It's about personal attention from faculty who genuinely care about your success.

Being part of our program is more than just classroom study. You'll have the opportunity to participate in our student organization, Chi Iota Sigma, as well as campus activities, the state programming contest, and our community outreach program.

need more information?

If you want to know more about the Computer Information Systems program at UAM, fill out the attached reply card and mail it today. If you need to contact us, call (870) 460-1091 or drop us an e-mail at cis@uamont.edu. Or you can visit our website at: www.uamont.edu/cis.
Appendix E

Faculty Meeting Minutes:

August 13, 2013

January 16, 2014

School of Computer Information Systems
UNIVERSITY OF ARKANSAS AT MONTICELLO
School of Computer Information Systems

Faculty Meeting
August 13, 2013

Meeting began at 10:03 a.m.

Present: Hairston, Cossey, Donham, Harris, Hendrix, Marsh, and Selby.

Classes with low enrollment
Dean Hairston reported on the classes projected to make this semester. The Provost will wait until 4:00 p.m. on Monday, August 19th to make a decision on which classes will make. Classes with an enrollment of less than seven (7) students are subject to be canceled. Classes will lose students dropped on Friday, August 16th. These students will need to be contacted on Monday, August 19th, and registration finalized. If a class with low enrollment has students that need the class to graduate in December or May, faculty should email the reasons for not canceling the class to Dean Hairston. He will discuss the request with Provost Yeiser.

If a class is canceled, what happens to faculty?
No faculty will receive a pay cut due to a canceled course. Faculty will be given an administrative reassignment such as: developing alternative plans, recruitment plans, retention plans, or the study of E-books. Faculty was advised to submit proposals for their administrative reassignments for approval if they thought their class might be canceled. Faculty discussed grant writing, but felt it would take more than a semester to complete. Faculty also discussed core classes being offered at the same time and the possibility of using the BBC 213 lab. These concerns will be taken into consideration when the draft for the spring schedule is started.

Recruiting/Retention ideas
Dean Hairston noted that a lot of students are added as CIS majors; however, there are a lot of students lost. He stated that 30% of freshmen are general education majors, but by the sophomore year only 8% of the students are general education majors. The School of CIS currently sends out letters to general education scholarship recipients and a flyer is sent to general education majors at the end of July each year. Dean Hairston will send an email to Crystal Halley and Dr. Ranelle Eubanks requesting students be enrolled in a Microcomputer Applications class when an elective is needed. Dean Hairston will have a conversation with Dr. Morris Bramlett about offering CIS as a minor option for Math majors. Dr. Becky Phillips will be contacted about setting up a CIS booth at regional Future Business Leaders of America (FBLA), Students In Free Enterprise (SIFE), and area High School conferences. Faculty discussed the need for a larger monitor for the CIS booth. A list of all CIS majors will be requested from Crystal Halley and students will be contacted and asked a list of five (5) questions regarding reasons for leaving or changing major to see if there is anything we can change to retain students. The answers could be used as evidence to document need for an associate degree in CIS if students can’t pass programming language classes. Faculty will send question suggestions to the Dean. Faculty discussed getting a list of undecided majors and every student in a major that requires a minor around preregistration, and sending them a short, sweet, to the point message about how CIS would enhance job opportunities.
As stated in the assessment report, Dean Hairston will begin interviewing CIS majors after completion of sophomore year or beginning of junior year, around the mid-point of their degree, after they complete PLD and PC Hardware to try to determine why we are losing them. A tutoring program was started in the spring of 2013 with only one (1) student participating; however, the program received positive feedback. Faculty was encouraged to announce the tutoring program in COBOL, Advanced COBOL, and Object-Oriented programming classes and advise the students to contact Dean Hairston or Ms. Jacobs if interested. On a positive note, Programming Logic and Design classes are currently having larger incoming classes.

A need has to be demonstrated to design a CIS associate degree similar to the CIS minor. Faculty discussed at length building a case for demand for a Computer Productivity associate degree with PC Hardware and Maintenance, Microcomputer Applications, Advanced Microcomputer Applications, Help desk/User support, and Business Communications as possible courses for a completely online degree. Programming Logic and Design, Microcomputer Applications, Advanced Microcomputer Applications and Business Communications are already offered online. Faculty was advised to look at this as an administrative project if their class is canceled or come up with another project.

Faculty discussed creation of a sophomore level UNIX/LINX class for spring 2014 that Dean Hairston would develop and teach in either the Network lab, PC Hardware lab or BBC 115 lab. Ms. Donham was asked to look at teaching Business Database Management Systems online. Ms. Selby will examine the possibility of teaching Ethics online. Faculty also discussed upper level electives, the number being offered, class size, and how often the classes should be taught – every 2 years or every 3 semesters.

BBC 122 lab
After the water leak in June, one (1) machine won’t connect to the internet due to a possible blown port and one (1) monitor was lost in the BBC 122 lab. A mat will be ordered for the lab. The lab should be operational when classes start.

Cart/Projector
A new projector will be installed in the BBC 104 classroom. After discussion the old projector will be sent to M&R.

CIS Facebook page
Chi Iota Sigma has a Facebook page that meetings, drop dates, job listings, etc. are posted to. Faculty will mention the UAM School of CIS Facebook page in their classes. A flyer will be created and posted in the classrooms and outside faculty offices the first week of school to increase membership in the CIS club. Faculty will give a Chi Iota Sigma handout to their advisees.

Pre/Post Course Exams
Dean Hairston updated faculty on the results of pre and post exams and how the exams are used in the assessment report. Faculty agreed to continue to follow the same process until more data has been reported before any changes are made.

Historic Grade Analysis
Dean Hairston pulled grades from 2009 to now for System Analysis and Design, Application Software Development Project, and Programming Logic and Design classes, and shared the results with faculty.
Results are broken down in percentage passed and failed. A grade analysis eventually will be done on all upper level classes.

**Specific Retention Report**
One of the questions on the assessment report asks - What new tactics to improve student learning has your unit considered, experimented with, researched, reviewed or put into practice over the past year? Faculty will have to do something brand new in the classroom that improves grades and increases student learning. In the past when hardware/software additions were used, it was determined this did not improve learning. Statistics are normally needed to support results for this question. Tutoring was added this year which did not require statistical specifics just the fact that the student passed. In addition, instructor’s in two (2) classes emailed students missed assignments. If a faculty member wants to try a new tactic, please notify Dean Hairston and he will do the research for you.

**2223/3103 Discussion**
All faculty members are still recommending Microcomputer Applications and Advanced Microcomputer Applications classes as general electives to students in order that the students will be better prepared when they graduate. Dean Hairston stated that when CIS classes are offered online at the Crossett campus, UAM CIS faculty will have the right of first refusal.

Faculty was requested to ask students the following question on the first day of class for HLC criteria/mission: What does UAM mean to you? After faculty discussion, students will be asked to answer the question and indicate their classification in an email that will be sent to Dean Hairston with a copy sent to the instructor.

Faculty agreed to hold a cookout on October 30, 2013 to promote CIS as a major or minor. Ms. Harris asked that UAM tents, chairs and tables be requested. Ms. Cossey volunteered to teach Dean Hairston’s class that day. The cookout will be from 10:30 a.m. to 12:00 p.m. with hot dogs and drinks served free of charge. Handouts will be distributed for change of major or minor, and to promote the need for a 60 hour associate degree in Computer Productivity with part of the courses being offered online requesting name, phone number and email address. Education will be contacted for specifics on their cookout promotion.

A new Development 101 class will be taught each semester by volunteers. The class will be taught as 2 -one hour classes or 1 - two hour class.

Faculty agreed on the following activities and dates:
Christmas Sweets – December 5, 2013
Alumni Day – March 14, 2014
Awards luncheon – April 24, 2014

The meeting adjourned at: 11:53 a.m.

Respectfully submitted,

Kathryn Jacobs, Administrative Specialist II
School of Computer Information Systems
Meeting began at 12:38 p.m.

Present: Hairston, Cossey, Donham, Harris, Marsh, and Selby

Picking a date/time for the Chancellor/Provost visit

Christy Pace in the Chancellor’s office provided Dean Hairston the following possible dates for the Chancellor/Provost visit: Wednesday, January 29th from 2:30 p.m. to 4:30 p.m.; Tuesday, February 11th from 2:00 p.m. to 4 p.m. or Thursday February 13th from 2:30 p.m. to 4:30 p.m. After discussion the faculty agreed on Wednesday, January 29th. If the visit has to be rescheduled, the visit will fall back to one of the other dates.

Pre/Post tests

Dean Hairston noted that the pre/post tests were good for assessment and asked faculty to complete the tests if they had not already completed them. Faculty was asked to resend their fall results to Dean Hairston. Faculty discussed the results and thought that almost all students had improved. Repeat students were discussed but faculty concluded this did not need to be addressed. Ms. Marsh correlated the end grade with the post test and made some changes in her classes. Grades do not have to be sent to Dean Hairston.

Assessment

A couple changes will be made on the assessment report. One change will affect the Exit Survey and Dean Hairston will talk to Ms. Marsh regarding this. The assessment period is from fall 2013 to spring 2014. Faculty should email Dean Hairston anything they are doing differently or have added to improve student learning.

HLC

Dean Hairston doesn’t know how the HLC review will impact the department, but he doesn’t expect any additional work. The reviewers will come to campus in October. When the reviewers are on campus they will randomly talk to students, and may ask for their opinions.

Faculty agreed it was beneficial to continue asking their students “What does UAM mean to me?”

Student Evaluations

Dean Hairston noted that online student evaluations were not counted if the class did not have three responses. Faculty discussed the use of in class paper evaluations proposed by some students to improve response. It was pointed out that students’ confidentiality concerns are unwarranted due to the results not being received until after finals are taken and grades are posted. The online evaluation question of whether or not a student could complete a class evaluation more than once was discussed and Dean Hairston
clarified that a student logs in with his/her username which only allows a student to login once for each class. One faculty member offered to give bonus points if 90% of the class participated and stated the 90% goal has never been reached. Another suggestion was to use the last five minutes of class to do the evaluations. Any thoughts on this subject should be sent to Dean Hairston.

**WWW/Android Discussion**
Faculty discussed changing the CIS major curriculum requirement from WWW Programming to WWW Programming or Programming Mobile Applications. The discussion included availability of labs, using student laptops, free software, and student numbers. The faculty agreed to the proposal to change the CIS major curriculum requirement effective fall 2014 to WWW Programming or Programming Mobile Applications. Dean Hairston will check with the absent faculty member for approval and if approved start the paper work for the C & S proposal.

**Summer/Fall Schedule**
If there are only two or three students in Programming Mobile Applications in the fall, Dean Hairston will try to convince the Provost to allow the class to make. Intersession classes with less than seven students will not make, and classes with seven students will receive 70% pay. Dean Hairston will try to accommodate faculty that want to teach in the summer. Faculty discussed class numbers and how the class numbers will be affected in the fall when freshmen students are required to stay on campus.

**BBC115 Lab**
Dean Hairston has been talking to Brian Daugherty regarding reinstalling software and freezing the computers in the BBC115 lab. The work should be completed this semester. Faculty can let students in the lab if they ask; however, the lab is not up to standard.

**CIS Class Rosters**
Ms. Marsh suggested faculty pull all of their class email rosters, copy and paste the rosters into a word document, and send the list of email addresses to the secretary in case a class needs to be notified of cancelation. The Dean and secretary cannot pull the email addresses at the current time.

**CIS Advanced Certificate**
Faculty discussed the need for flexibility in the CIS Advanced Certificate Program, building the program to look like the CIS minor, completing the program in 2 semesters, and if the program has to be 24 hours. After discussion, Dean Hairston will find out the requirements for the CIS Advanced Certificate from Dr. Yeiser.

**CIS Associate Degree**
Faculty was encouraged to look for a way to justify a CIS Associate degree. Faculty discussed students that attempt a CIS major, but can’t complete the degree, and CIS majors that have changed to General Studies because they can’t complete the degree.

**Software Upgrades**
Faculty discussed fall 2014 software upgrades to Windows 8 and Office 365. A decision needs to be made for book orders. Dean Hairston will check with Bryan Daugherty in Information Technology and get back with the faculty.
Alumni Day
There are eight spots for speakers for Alumni Day on March 14th, with four spots tentatively lined up. Speakers were suggested and will be contacted. The University Center Senate Room has been reserved for the Alumni Day luncheon.

CIS Tutoring
Dean Hairston asked faculty to refer suggestions for CIS tutors to him and to announce the availability of tutors in OOP, COBOL, and Advanced COBOL classes. Funding may be withdrawn if the program is not used. Dean Hairston volunteered to visit the classes to encourage student participation.

Awards Reception
The University Center Capital Room has been reserved for the CIS Awards Reception on April 24th.

The meeting adjourned at: 1:32 p.m.

Respectfully submitted,

Kathryn Jacobs, Administrative Specialist II
School of Computer Information Systems
Appendix F

Senior Exit Survey

School of Computer Information Systems
Both the Fall 2013 and Spring 2014 CIS 4634 Senior Project classes were given the UAM CIS Student Exit Survey. Of the 20 students successfully completing the course, all 20 completed the survey. The average GPA for the students was 2.93 with individual GPA’s ranging from 2.19 to 4.00. The quantitative values were examined and the comments were consolidated. The 2013-2014 data was then compared to the results from 2009 – 2012.

Of our five Student Learning Objectives (SLO), four (Productivity Software Packages, Programming Languages, Development Methods and Techniques, and Communication of Information) are in the Excellent range. The exception continues to be the Data Communications and LAN area which is in the Average category. The trend line for this SLO predicts a steady score in the Average category. The students want more in this area. Is there anything we can do to improve this SLO?

Knowledgeable faculty, academic advising, staff and technical support, and the overall CIS experience continue to be strong aspects (Excellent range) of our CIS program. The Quality aspect of CIS equipment continues in the average range with students wanting the most recent software. The CIS Club also remains in the Average category. Further inspection showed only a few of the students were involved in the club. What can we do to increase the number of students in the club?

For CIS Course Content and Effectiveness, all core courses were in the Excellent category! Keep up the good work.

The following are the open-ended questions asked on the survey. The comments that follow each question summarize the answers.

What do you see as the greatest strengths in the CIS program?

A majority of students (16 out of 20) mentioned the knowledge and support of the faculty as a strength. This supports the 4.65/5.00 average for Knowledgeable Faculty on the CIS Program Aspects.

The few other comments in this area were about the small class sizes, use of group/semester projects, and the ability to learn several programming languages.
What would you like to see changed about the CIS program?

Most of the comments in this area dealt with curriculum. The students basically requested more advanced courses in programming and networking (6/15) and also more languages - Linux was mentioned three times.

As you review these documents, please note any ideas for improvement. These CIS Student Exit Surveys have resulted in many positive changes for our department and will continue to help us strengthen the program.

Attachments

UAM CIS Student Exit Survey
CIS Student Exit Survey – Current Year Charts
CIS Student Exit Survey – Comparison Year Charts
CIS Student Learning Objectives – Trend line Charts
CIS Program Aspects – Trend line Charts
CIS Course Content and Effectiveness – Trend line Charts
UAM CIS Student Exit Survey

Please take a few moments to fill out this survey. Your input is vital in improving our CIS major. The survey is done anonymously and the data collected is used in aggregate only; no individual information can be identified from the results.

Using the following scale, please indicate the extent to which the **CIS program** has contributed to your growth in each of the following areas.

<table>
<thead>
<tr>
<th>Skill</th>
<th>5</th>
<th>4</th>
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<th>N/A</th>
<th>Comment</th>
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<tbody>
<tr>
<td><strong>Practical knowledge of various productivity software packages</strong></td>
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<td>Students’ ability to efficiently use Microsoft Office.</td>
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<td><strong>Practical knowledge of various programming languages</strong></td>
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<td>Students’ ability to develop logical solutions utilizing various</td>
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<td>programming languages, data file usage, flowcharts, pseudocode,</td>
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<td>structure charts, printer spacing charts, and/or IPO charts.</td>
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<td><strong>Knowledge of information systems development methods and techniques</strong></td>
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<td>Students’ ability to perform the analysis (requirements gathering,</td>
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<td>modeling, etc.) and design (input, output, database, web, error</td>
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<td>messages, etc.) necessary to build an information system.</td>
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<td><strong>Knowledge of data communications and local area networks</strong></td>
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<td>Students’ ability to plan, create, and manage a local area network.</td>
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<td><strong>Knowledge of Communication Skills</strong></td>
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<td>Students’ ability to produce memos, status reports, Gantt charts,</td>
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<td>manuals, programming documentation, knowledge contributions, and oral</td>
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<td>presentations utilizing such packages as Word, Visio, and PowerPoint.</td>
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Using the following scale, please rank the following aspects of the CIS degree program.

5 – Outstanding  
4 – Excellent  
3 – Good/Average  
2 – Fair  
1 – Poor  
N/A – Not applicable

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<tr>
<th>Aspect</th>
<th>5</th>
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<tr>
<td>Knowledgeable faculty</td>
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<td>CIS Club</td>
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<td>Library holdings and facilities</td>
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<td>Overall CIS experience</td>
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Using the above scale, please tell us your opinion of the content and instructional effectiveness for each of the following required CIS courses?

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>5</th>
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<th>1</th>
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<tr>
<td>CIS 1193</td>
<td>Hardware/Software Maintenance</td>
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<td>CIS 2203</td>
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<td>CIS 2223</td>
<td>Micro Apps</td>
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<td>CIS 3103</td>
<td>Advanced Micro Apps</td>
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<td>CIS 3423</td>
<td>COBOL</td>
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<td>CIS 3443</td>
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<td>CIS 3453</td>
<td>WWW Programming</td>
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<td>CIS 3523</td>
<td>Analysis &amp; Design</td>
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<tr>
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<tr>
<td>CIS 4633</td>
<td>Senior Project</td>
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</table>
Comments in this section help us improve the CIS degree program. Such offerings as the CIS Club and the small CIS side lab are a result of these comments. Please help us improve the CIS program by giving us your thoughts.

What do you see as the greatest strengths in the CIS program?

What would you like to see changed about the CIS program?

Thank you for your time.
2013-14 Analysis of CIS Student Exit Survey

CIS Student Learning Objective Averages

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<th>Objective</th>
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<tr>
<td>Productivity Software Packages</td>
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<td>Programming Languages</td>
<td>4.40</td>
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<tr>
<td>Development Methods and Techniques n=23</td>
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<tr>
<td>Data Communications and LAN</td>
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<td>Communication Skills</td>
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CIS Program Aspect Averages

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<td>Knowledgeable Faculty</td>
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<td>Academic Advising</td>
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<td>CIS Club</td>
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<td>Quality of Equipment and Facilities</td>
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<tr>
<td>Quantity of Equipmen and Facilities</td>
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<td>Staff and Technical Support</td>
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<td>Library Holdings and Facilities</td>
<td>4.28</td>
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<td>Overall CIS Experience</td>
<td>4.60</td>
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CIS Course Content & Effectiveness Averages

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<td>CSE 193</td>
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<tr>
<td>CSE 2203</td>
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<td>CSE 2223</td>
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<td>CSE 3103</td>
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<td>CSE 4634</td>
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<tr>
<td>CSE 4634</td>
<td>4.65</td>
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</table>
This SLO shows a slow, steady in the Excellent range. We are doing a good job teaching the various software packages.

This SLO remains steady in the Excellent range. We are doing a good job teaching the various programming languages.
This SLO is tied strongly to the Systems Analysis and Design class. Doing more hands-on work, in addition to the theory, has improved the student’s view of the amount they are learning about systems development.

The large rise from 2010 to 2011 may be attributed to the newer hardware, which allowed for newer software to be used. Students continue to indicate they want more in this area.
The various activities we do to improve the students’ communication skills appears to be working. Let’s keep up the good work!
Historical Program Aspects using Trendlines

Knowledgeable Faculty

Academic Advising

CIS Club
Faculty continues to be one of the strongest aspects of our program. Many comments about what is right with our program center on faculty knowledge and their support of the student.

Academic Advising rose this year. The WeevilNet system degree audits, the manual check sheets we use, and our better familiarity with WeevilNet may attribute to this rise. The CIS Club also experienced a rise this past year. However, it is still in the Average range. Many of our students are not members. What can we do to increase club membership?

The Quality and Quantity of lab computers continues in the Average category. Because this has been an item of concern from past surveys, we have turned the old Economics Library into a new lab designated for CIS majors and minors only.

The Staff and Technical Support remains steady in the Excellent category. The Library Holdings & Facilities had a decrease this year putting it back to basically where it had been.

The students continue to enjoy their Overall CIS experience by ranking it in the Excellent category!
Historical CIS Course Content and Effectiveness Trendlines

CIS1193

CIS2203

CIS2223
All of the courses were in the Excellent category. Most trendlines predict a steady future. Keep up the good work.
Appendix G

CIS Alumni Survey

School of Computer Information Systems
The School of Computer Information Systems (CIS) at the University of Arkansas at Monticello (UAM) is gathering information to evaluate the quality and effectiveness of your educational experience. This survey asks you for information on five major areas: your personal data, your employment information, your education since UAM, your CIS learning experiences, and your satisfaction with your education.

Your responses are confidential. The survey report will provide only totals and aggregate results. No individual answers will be reported. Identification of individuals in reported statistics will be impossible.

You will also be provided space for open-ended responses. Please use the opportunity to express your opinions.

Your prompt return of this survey is greatly appreciated. Please complete this survey and return it in the enclosed postage paid envelope by December 1, 2012.

Thank you for your assistance.

| Personal Data |

*Optional data may be shared with the UAM Alumni Affairs office.*

What year did you graduate? ____________________________________

Name (Optional) _______________________________________________

Address (Optional) _____________________________________________

City, State Zip (Optional) ________________________________________

Email (Optional) _______________________________________________

Please check the appropriate boxes below:

- Sex - ☐ female ☐ male
  - Age - ☐ 18 - 25 ☐ 26 - 30 ☐ 31 - 40 ☐ 41 - 50 ☐ 51 - 60 ☐ over 60
  - Marital status - ☐ divorced ☐ married ☐ single ☐ widowed
  - Race - ☐ African American ☐ American Indian ☐ Caucasian ☐ Hispanic ☐ Other
### Employment Data

Please check the appropriate boxes below

1. Which best describes what you are doing now?

<table>
<thead>
<tr>
<th>□</th>
<th>Employed full-time</th>
<th>□</th>
<th>Caring for a home and/or family</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>Employed part-time</td>
<td>□</td>
<td>Retired</td>
</tr>
<tr>
<td>□</td>
<td>Self-employed</td>
<td>□</td>
<td>Unemployed – looking for work</td>
</tr>
<tr>
<td>□</td>
<td>Serving in the armed forces</td>
<td>□</td>
<td>Unemployed – not looking for work</td>
</tr>
<tr>
<td>□</td>
<td>Continuing my education</td>
<td>□</td>
<td>Other __________________________</td>
</tr>
<tr>
<td>□</td>
<td>Employed AND continuing my education</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. If you were ever employed full-time, how long after graduation was it before you got your first full-time job?

<table>
<thead>
<tr>
<th>□</th>
<th>Had a job prior to graduation</th>
<th>□</th>
<th>Over 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>2 months or less</td>
<td>□</td>
<td>Never had a full-time job</td>
</tr>
<tr>
<td>□</td>
<td>3 to 6 months</td>
<td>□</td>
<td>Continued my education after graduation</td>
</tr>
<tr>
<td>□</td>
<td>7 to 12 months</td>
<td>□</td>
<td>Other __________________________</td>
</tr>
</tbody>
</table>

For questions 3 through 9 please refer to your current primary job.

3. Please list your job title. ____________________________________________

4. Which best describes the area of your primary job function?

<table>
<thead>
<tr>
<th>□</th>
<th>Networking</th>
<th>□</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>Internet Applications</td>
<td>□</td>
<td>Management</td>
</tr>
<tr>
<td>□</td>
<td>Application Programming</td>
<td>□</td>
<td>Research and Development</td>
</tr>
<tr>
<td>□</td>
<td>Systems Programming</td>
<td>□</td>
<td>Consultant</td>
</tr>
<tr>
<td>□</td>
<td>Database</td>
<td>□</td>
<td>Help Desk</td>
</tr>
<tr>
<td>□</td>
<td>Security</td>
<td>□</td>
<td>Other __________________________</td>
</tr>
<tr>
<td>□</td>
<td>Training/Education</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. How closely related to your CIS degree is your current job?

<table>
<thead>
<tr>
<th>□</th>
<th>Not related</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>Somewhat related</td>
<td>□</td>
<td>Directly related</td>
</tr>
<tr>
<td>□</td>
<td>Directly related</td>
<td></td>
<td>Other __________________________</td>
</tr>
<tr>
<td>□</td>
<td>Other __________________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. How well did your CIS degree prepare you for your current job?
   □ Not at all       □ Very well
   □ Poorly          □ Superbly
   □ Fairly          □ Other _____________________________
   □ Adequately

7. How well do you think your CIS degree has enhanced your prospects for future advancement?
   □ Very well
   □ Somewhat
   □ Not at all
   □ Other _____________________________

8. What is your current annual income? This information will be held in the strictest confidence.
   □ less than $10,000
   □ $10,000 to $19,999
   □ $20,000 to $29,999
   □ $30,000 to $39,999
   □ $40,000 to $49,999
   □ $50,000 to $59,999
   □ $60,000 to $69,999
   □ $70,000 to $79,999
   □ $80,000 to $89,999
   □ $90,000 to $99,999
   □ over $100,000
   □ prefer not to say

<table>
<thead>
<tr>
<th>Education since UAM</th>
</tr>
</thead>
</table>

9. How well did your CIS degree prepare you for any additional education?
   □ Not at all       □ Very well
   □ Poorly          □ Superbly
   □ Fairly          □ Does not apply
   □ Adequately      □ Other _____________________________

10. Compared to your peers in any educational situation, how well did your CIS degree prepare you for additional education?
    □ Not at all       □ Very well
    □ Poorly          □ Superbly
    □ Fairly          □ Does not apply
    □ Adequately      □ Other _____________________________
Listed below in Column A are several areas of development and learning which may be influenced by a college education. Please indicate in Column B how your experience at UAM helped you grow in each of these areas, where “1” is “no growth” and “5” is a great deal of growth. Then in Column C indicate whether you now feel that your experiences put (1) too little, (3) too much, or (2) just the right amount of emphasis on each of these areas. Circle the number to indicate your response.

<table>
<thead>
<tr>
<th>A. Learning Areas</th>
<th>B. Growth Experienced</th>
<th>C. Emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of various productivity software packages</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Knowledge of various programming languages</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Knowledge of information systems development methods and techniques</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Knowledge of data communications and local area networks</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Teamwork problem-solving skills</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Critical thinking skills</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Oral communication skills</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Written communication skills</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Accounting</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Economics</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Statistics</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Management</td>
<td>None</td>
<td>Great Deal</td>
</tr>
<tr>
<td>Marketing</td>
<td>None</td>
<td>Great Deal</td>
</tr>
</tbody>
</table>
In the following section, please circle your level of satisfaction with the following aspects of your CIS experience. After you indicate your level of satisfaction, pick the five items that are most important to you. Use the extra box at the right of the scale in which to check your five most important items.

VS = Very Satisfied; S = Satisfied; N = Neutral; D = Dissatisfied; VD = Very Dissatisfied

<table>
<thead>
<tr>
<th>Items</th>
<th>Level of Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic advising</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Course content in regard to difficulty</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Scholarship Opportunities</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>CIS Curriculum</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Required courses outside CIS</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Class size</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>CIS Faculty</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>CIS Staff</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Computer software</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>CIS Seminar courses</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Availability of CIS classes</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Time at which major courses were offered</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Personal attention</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>CIS Labs &amp; Classrooms - hardware</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Overall quality of your education</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Other -</td>
<td>VS S N D VD</td>
</tr>
<tr>
<td>Other -</td>
<td>VS S N D VD</td>
</tr>
</tbody>
</table>

What course(s) do you now feel were the most beneficial to you?  
_____________________________________________________________________________

What course(s) do you now feel were the least beneficial to you?  
_____________________________________________________________________________

Please offer any comments you may have about your UAM CIS experience.  
_____________________________________________________________________________

Thank you for participating in our survey!
Employment-Job Title and Function

Web Designer
Programmer/Analyst
Systems Technician
IT Support and Telecommunications Coordinator
Network Analyst
Senior GIS Programmer
Database Administrator
Programmer Analyst

Most Beneficial Courses

SAD (Systems Analysis and Design)

Database Classes and Web programming based on current job duties.

C# and COBOL. As a GIS Developer I practice in multiple subject areas that span from Computer Science to GIS/Remote Sensing. My knowledge of C# and understanding of programming logic via COBOL has helped me easily pick up various other languages for work that I use on a daily basis (Python, Java, JavaScript, C#, C++, XAML, WPF, XML, Linux, Android).

Cobol

Data Communication

Systems Analysis and Design SQL COBOL

All of my programming classes helped me tremendously.

Database and Web Design.
Least Beneficial Courses

PC Hardware

Micro Computer Systems - I was already quite knowledgeable in the area.

Structural Systems Analysis and Design.

Networking class, this is a class that needs to be expanded on in many areas

Accounting

Marketing

The networking classes, I wish we would've learned more about setting up networks.

Comments About UAM CIS Experience

Due to my current job role a second class on SQL / Database Administration would have been really nice. Overall I really enjoyed my time at UAM in the CIS school.

I would suggest that UAM consider offering a CIS program that is closer related to Computer Science and one that is closer related to Information Systems. As a result of combining CIS and GIS, I am now in a position where I have received tons of offers for various programming positions. If anything, the CIS program at CIS has taught transformed me into a jack of all trades that can also produce results in any situation.

The program is GREAT! The only thing I would suggest is more emphasis on Networking and Data Communications. Thank you for an awesome experience!

Overall my UAM experience was great, family atmosphere, great faculty, prepared me for the future.
2013 CIS Alumni Survey Analysis

Introduction

Description of Sample

The 2013 survey was presented on the UAM website. Graduates were contacted via email, and sent a postcard in the mail with the link to the survey, and encouraged to respond. Fifty-one graduates were contacted from the 2008, 2010, and 2012 graduating classes. Eight completed surveys were submitted; two from the 2008 class, two from the 2010 class, and four from the 2012 class. Three respondents were female and five respondents were male.

Degree Relationship to Employment

Of the eight respondents, all eight are working in the CIS field as programmers, technical support, web designer, network analysts, and database administrators. All eight of the respondents are currently employed. Six respondents indicated that current employment is directly related or somewhat related to their CIS degree. Seven respondents indicated that the CIS degree prepared them for their position and seven respondents believed that the CIS degree enhanced their prospects for future advancement.

Learning Outcomes

The responses for growth measurement were scored on a semantic differential scale where 1 = “No growth” and 5 = “Great growth.” The responses for the emphasis measurement were scored on a Likert scale where 1 = “Too little,” 2 = “About right,” and 3 = “Too much.”

Learning Outcome One (Productivity Software Packages)

Six respondents indicated that the instruction received helped prepare them to expand their knowledge of productivity software packages in their present position ($M=3.13$). Six of the respondents indicated that the emphasis on productivity software packages was “about right” ($M=1.75$).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Growth</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>9</td>
<td>3.67</td>
<td>2009</td>
<td>9</td>
<td>1.89</td>
</tr>
<tr>
<td>2010</td>
<td>9</td>
<td>3.78</td>
<td>2010</td>
<td>9</td>
<td>1.78</td>
</tr>
<tr>
<td>2011</td>
<td>9</td>
<td>4.00</td>
<td>2011</td>
<td>9</td>
<td>1.89</td>
</tr>
<tr>
<td>2012</td>
<td>8</td>
<td>3.00</td>
<td>2012</td>
<td>7</td>
<td>2.43</td>
</tr>
<tr>
<td>2013</td>
<td>8</td>
<td>3.13</td>
<td>2013</td>
<td>8</td>
<td>1.75</td>
</tr>
</tbody>
</table>
Learning Outcome Two (Programming Languages)

Seven respondents indicated that the instruction received helped prepare them to expand their knowledge of programming languages in their present position ($M=3.75$). Seven respondents indicated that the emphasis on programming languages was “about right” ($M=1.88$).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>9</td>
<td>3.89</td>
<td>2009</td>
<td>9</td>
<td>1.67</td>
</tr>
<tr>
<td>2010</td>
<td>9</td>
<td>4</td>
<td>2010</td>
<td>9</td>
<td>1.89</td>
</tr>
<tr>
<td>2011</td>
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<td>2011</td>
<td>9</td>
<td>1.78</td>
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<tr>
<td>2012</td>
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<tr>
<td>2013</td>
<td>8</td>
<td>3.75</td>
<td>2013</td>
<td>8</td>
<td>1.88</td>
</tr>
</tbody>
</table>

Learning Outcome Three (IS Development Methods and Techniques)

Eight respondents indicated that the instruction received helped prepare them to expand their knowledge of information systems development methods and techniques in their present position ($M=3.88$). Five respondents indicated that the emphasis on information systems development methods and techniques was “about right” ($M=1.63$).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2009</td>
<td>9</td>
<td>1.67</td>
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<td>2010</td>
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<td>2011</td>
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<td>1.89</td>
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<td>2012</td>
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<td>3.5</td>
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<td>2013</td>
<td>8</td>
<td>3.88</td>
<td>2013</td>
<td>8</td>
<td>1.63</td>
</tr>
</tbody>
</table>

Learning Outcome Four (Data Communications and Local Area Networks)

Four respondents indicated that the instruction received helped prepare them to expand their knowledge of data communications and local area networks in their present position ($M=3.13$). Seven respondents indicated that the emphasis on data communications and local area networks was “too little” and one respondent indicated that the emphasis was “about right” ($M=1.13$).
<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2009</td>
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<td>2011</td>
<td>9</td>
<td>2.89</td>
<td>2011</td>
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<td>1.50</td>
</tr>
<tr>
<td>2012</td>
<td>8</td>
<td>2.88</td>
<td>2012</td>
<td>7</td>
<td>1.57</td>
</tr>
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<td>8</td>
<td>3.13</td>
<td>2013</td>
<td>8</td>
<td>1.13</td>
</tr>
</tbody>
</table>

**Learning Outcome Five (Communication Skills)**

Six respondents indicated that the instruction received helped prepare them to expand their knowledge of communication skills in their present position ($M=3.38$). Eight respondents indicated that the emphasis on teamwork problem-solving skills was “about right” ($M=2.00$).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>9</td>
<td>3.78</td>
<td>2009</td>
<td>9</td>
<td>1.89</td>
</tr>
<tr>
<td>2010</td>
<td>9</td>
<td>3.89</td>
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<td>2011</td>
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<td>2.11</td>
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<tr>
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<td>8</td>
<td>3.13</td>
<td>2012</td>
<td>7</td>
<td>2.00</td>
</tr>
<tr>
<td>2013</td>
<td>8</td>
<td>3.38</td>
<td>2013</td>
<td>8</td>
<td>2.00</td>
</tr>
</tbody>
</table>

**Supportive Requirements**

The responses for growth measurement were scored on a semantic differential scale where 1 = “No growth” and 5 = “Great growth.” The responses for the emphasis measurement were scored on a Likert scale where 1 = “Too little,” 2 = “About right,” and 3 = “Too much.”

**Small Group Communication**

Seven respondents indicated that the instruction received helped prepare them to expand their knowledge of small group communication in their present position ($M=3.38$). Eight respondents indicated that the emphasis on small group communication was “about right” ($M=2.00$).
Five Year Comparison of Supportive Requirement in Small Group Comm

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>9</td>
<td>3.11</td>
<td>2009</td>
<td>9</td>
<td>1.89</td>
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<tr>
<td>2010</td>
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<tr>
<td>2013</td>
<td>8</td>
<td>3.38</td>
<td>2013</td>
<td>8</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Technical Writing

Six respondents indicated that the instruction received helped prepare them to expand their knowledge of technical writing in their present position \((M=3.38)\). Seven respondents indicated that the emphasis on technical writing was “about right” \((M=2.13)\).

Five Year Comparison of Supportive Requirement in Technical Writing

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
<td>2009</td>
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<td>3.38</td>
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</tr>
</tbody>
</table>

Accounting

Six respondents indicated that the instruction received helped prepare them to expand their knowledge of accounting in their present position \((M=3.00)\). Six respondents indicated that the emphasis on accounting was “about right” \((M=2.25)\).

Five Year Comparison of Supportive Requirement in Accounting

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
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<td>2013</td>
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<td>2013</td>
<td>8</td>
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</tbody>
</table>
Economics

Five respondents indicated that the instruction received helped prepare them to expand their knowledge of economics in their present position ($M=2.75$). Six respondents indicated that the emphasis on economics was “about right” ($M=2.25$).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
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</thead>
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<td>2.75</td>
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</tr>
</tbody>
</table>

Statistics

Five respondents indicated that the instruction received helped prepare them to expand their knowledge of statistics in their present position ($M=3.00$). Five respondents indicated that the emphasis on statistics was “about right” ($M=2.13$).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
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</tbody>
</table>

Management

Five respondents indicated that the instruction received helped prepare them to expand their knowledge of management in their present position ($M=2.88$). Six respondents indicated that the emphasis on management was “about right” ($M=2.00$).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
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<td>2.88</td>
<td>2013</td>
<td>8</td>
<td>2.00</td>
</tr>
</tbody>
</table>
Marketing

Six respondents indicated that the instruction received helped prepare them to expand their knowledge of marketing in their present position \((M=2.75)\). Five respondents indicated that the emphasis on marketing was “about right” \((M=2.25)\).

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
<th>Survey Year</th>
<th>Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2009</td>
<td>9</td>
<td>1.89</td>
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<td>2011</td>
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<td>2011</td>
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<td>2.00</td>
</tr>
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<td>2012</td>
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<td>1.86</td>
</tr>
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<td>2013</td>
<td>8</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Satisfaction with Learning Experience

The responses for the Satisfaction with Learning Experience measurement were scored on a Likert scale where 1 = “Very dissatisfied,” 2 = “Dissatisfied,” 3 = “Neutral,” 4 = “Satisfied,” and 5 = “Very satisfied.”

The measurement was conducted with 16 items that included 1) Academic advising \((M=4.5)\), 2) Quality of instruction \((M=4.25)\), 3) Course content \((M=3.88)\), 4) Level of rigor and scholarship \((M=4.13)\), 5) CIS curriculum \((M=3.63)\), 6) Required courses outside CIS – Supportive Courses \((M=3.50)\), 7) Class size \((M=4.38)\), 8) CIS faculty \((M=4.13)\), 9) CIS staff \((M=4.25)\), 10) Computer technology \((M=3.63)\), 11) CIS seminar courses \((M=3.63)\), 12) Availability of classes \((M=3.75)\), 13) Time at which major courses were offered \((M=4.13)\), 14) Personal attention \((M=4.50)\), 15) CIS facilities \((M=3.63)\), and 16) Overall quality of your education \((M=3.86)\).
<table>
<thead>
<tr>
<th>Scale Item</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
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<tr>
<td>Quality of Instruction</td>
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<td>3.88</td>
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<td>3.63</td>
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<tr>
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<td>3.78</td>
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<td>3.50</td>
</tr>
<tr>
<td>Class Size</td>
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<td>4.67</td>
<td>4.33</td>
<td>4.50</td>
<td>4.38</td>
</tr>
<tr>
<td>CIS Faculty</td>
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<td>4.33</td>
<td>4.44</td>
<td>4.63</td>
<td>4.13</td>
</tr>
<tr>
<td>CIS Staff</td>
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<td>4.44</td>
<td>4.63</td>
<td>4.25</td>
</tr>
<tr>
<td>Computer Technology</td>
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<td>4.11</td>
<td>4.11</td>
<td>4.13</td>
<td>3.63</td>
</tr>
<tr>
<td>CIS Seminar Courses</td>
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<td>3.75</td>
<td>3.63</td>
</tr>
<tr>
<td>Availability of Classes</td>
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<td>3.75</td>
</tr>
<tr>
<td>Time Offered</td>
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<td>4.13</td>
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<tr>
<td>Personal Attention</td>
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<td>4.44</td>
<td>4.38</td>
<td>4.50</td>
</tr>
<tr>
<td>CIS Facilities</td>
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<td>3.78</td>
<td>4.38</td>
<td>3.63</td>
</tr>
<tr>
<td>Overall Quality</td>
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<td>4.00</td>
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</tr>
</tbody>
</table>
University of Arkansas at Monticello
Computer Information Systems
Employer Survey

The Division of Computer Information Systems (CIS) at the University of Arkansas at Monticello (UAM) is gathering information to evaluate the quality and effectiveness of our graduates. This survey asks you for information on three major areas: your organization, the importance of various job skills and performance of UAM graduates in those skills, and your general comments about the quality of higher education at UAM. Please use this opportunity to express your opinions.

Your responses are confidential. The survey report will provide only totals and aggregate results. No individual answers will be reported. Identification of specific organizations in reported statistics will be impossible.

Your prompt return of this survey is greatly appreciated. Please complete this survey and return it in the enclosed postage paid envelope by December 1st, 2013.

Thank you for your assistance.

---

### Your Organization

Please check the appropriate boxes below

1. Which best describes your type of organization?
   - **Agriculture**
   - **Banking**
   - **Construction**
   - **Education**
   - **Entertainment/Recreation**
   - **Finance/Insurance**
   - **Food Services**
   - **Forestry**
   - **Government**
   - **Other (please specify)______________________________

2. How many employees does your organization have?
   - **1 - 4**
   - **5 - 9**
   - **10 - 19**
   - **20 - 49**
   - **50 - 99**
   - **100 - 149**
   - **150 - 199**
   - **200 or more**

3. What are the major criteria used in your hiring process? (Check up to three.)
   - **Work experience**
   - **College degree**
   - **College major/minor**
   - **Recommendations**
   - **Social skills**
   - **Grade point average**
   - **Extracurricular activities**
   - **Performance on internal examinations**
   - **Other (please specify)______________________________
4. How do you rate the following skills when you make your hiring decisions, and how do you rate graduates overall on these same skills?

For example, if you consider problem solving skills to be extremely important in your hiring decisions, and the actual problem solving skills of graduates are just average, then you would respond as follows:

<table>
<thead>
<tr>
<th>How important is this skill?</th>
<th>How do UAM graduates rate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>High</td>
</tr>
<tr>
<td>X</td>
<td>Problem solving</td>
</tr>
</tbody>
</table>

### Analytical and Critical Thinking Skills
- Problem solving
- Critical thinking
- Ethics
- Professionalism
- Creativity

### Business Fundamentals
- Business models
- Accounting
- Economics
- Statistics
- Management
- Marketing

### Interpersonal, Communication, and Team Skills
- Ability to learn
- Time management
- Motivation
- Dependability
<table>
<thead>
<tr>
<th>How important is this skill?</th>
<th>How do UAM graduates rate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>High</td>
</tr>
<tr>
<td>Listening</td>
<td></td>
</tr>
<tr>
<td>Speaking</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td></td>
</tr>
<tr>
<td>Conflict management</td>
<td></td>
</tr>
<tr>
<td>Team work</td>
<td></td>
</tr>
<tr>
<td><strong>Technology Skills</strong></td>
<td></td>
</tr>
<tr>
<td>Word processing</td>
<td></td>
</tr>
<tr>
<td>Spreadsheets</td>
<td></td>
</tr>
<tr>
<td>PC databases</td>
<td></td>
</tr>
<tr>
<td>Presentations</td>
<td></td>
</tr>
<tr>
<td>Programming languages</td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td></td>
</tr>
<tr>
<td>Web site development</td>
<td></td>
</tr>
<tr>
<td>Database design and administration</td>
<td></td>
</tr>
<tr>
<td>Networking (LAN/WAN)</td>
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<tr>
<td>Systems software</td>
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<td>Operating systems</td>
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<tr>
<td><strong>Business System Development</strong></td>
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<td>Systems analysis</td>
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<tr>
<td>Systems design</td>
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<td>Project management</td>
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<td>Testing</td>
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<tr>
<td>Deployment</td>
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<tr>
<td>Other -</td>
<td></td>
</tr>
<tr>
<td>Other -</td>
<td></td>
</tr>
</tbody>
</table>
5. What particular strengths do you think UAM graduates possess?

6. In what areas does UAM need to improve its preparation of graduates for employment?

Would your organization be interested in having a CIS major intern with you for a semester?

You would receive a student knowledgeable in various aspects of information technology eager to apply their knowledge to enhance your organization. If interested, please contact the UAM Division of CIS at cis@uamont.edu or by calling 870.460.1031.

Thank you for participating in our survey!

6/2008
2013 CIS Employer Survey Analysis

Introduction

Description of Sample

The 2013 survey was mailed out to known employers of UAM CIS graduates, and other potential employers in the local geographic area. The School of CIS mailed 134 employer surveys, seven were returned non-deliverable, four were resent to updated address, twenty-six were completed and returned, and one was returned incomplete.

Job Skills

The responses on the left side show the importance that employers placed on the job skills listed below, with a “5” representing “Very High” importance, and a “1” representing “Very Low” importance. The responses on the right side represent employers rating of How High UAM graduates rank in these areas. The twenty-six completed surveys provided this information.

<table>
<thead>
<tr>
<th>Importance</th>
<th>Skill</th>
<th>How UAM graduates rate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>High</td>
<td>Average</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

Looking at the employer response data, all five of these skills were important to the employers surveyed, with Ethics and Professionalism being the most important. UAM graduates were rated strongest in Problem Solving and Ethics, and lowest in Professionalism. The School of CIS has put additional emphasis in recent years on improving student communication skills, added an etiquette luncheon, and incorporated more job preparation content into courses.
### Business Fundamentals

<table>
<thead>
<tr>
<th>Importance</th>
<th>How UAM graduates rate?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very High</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Business Models</td>
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<tr>
<td>Accounting</td>
<td>4</td>
</tr>
<tr>
<td>Economics</td>
<td>4</td>
</tr>
<tr>
<td>Statistics</td>
<td>1</td>
</tr>
<tr>
<td>Management</td>
<td>3</td>
</tr>
<tr>
<td>Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

From the employer responses, Accounting and Management were the two most important Business Fundamental areas. UAM graduates rated strongest in Business Models and Accounting, but over 50% of the responses judged UAM graduates “Average” in all Business Fundamentals. The School of CIS incorporates Business Fundamental courses into the curriculum to help graduates understand the role of Information Technology within the business enterprise.

### Interpersonal, Communication, and Team Skills

<table>
<thead>
<tr>
<th>Importance</th>
<th>How UAM graduates rate?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very High</td>
</tr>
<tr>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Ability-to Learn</td>
<td></td>
</tr>
<tr>
<td>Time Management</td>
<td>10</td>
</tr>
<tr>
<td>Motivation</td>
<td>18</td>
</tr>
<tr>
<td>Dependability</td>
<td>22</td>
</tr>
<tr>
<td>Listening</td>
<td>14</td>
</tr>
<tr>
<td>Speaking</td>
<td>13</td>
</tr>
<tr>
<td>Writing</td>
<td>11</td>
</tr>
<tr>
<td>Conflict Management</td>
<td>7</td>
</tr>
<tr>
<td>Team Work</td>
<td>12</td>
</tr>
</tbody>
</table>

From the employer data, all of the surveyed Interpersonal, Communication, and Team Skills areas were very important to employers, with Dependability, Ability to Learn, and Motivation being the most important. UAM graduates ranked the highest in the Ability to Learn, Motivation, Dependability, and Team Work categories. UAM graduates were the weakest in Time Management and Motivation. All of these skills are important to the School of CIS coursework, but Ability to Learn is especially critical. Due to the rapid evolution of technology, CIS students have to be prepared to continually learn as they progress in their careers. CIS coursework teaches students how to be effective lifetime learners, a skill that is critical to their professional success.
Among Technology Skills, employers placed the most importance on Spreadsheets, the Internet, and Systems Software skills. UAM graduates were judged strong in Word Processing, Spreadsheets, PC Databases, and the Internet. UAM students were judged weakest in Programming Languages, and overall a majority of the responses were “Average” in many of the other skills. UAM has added two new programming courses in recent years to help offer students more choices in a wider variety of programming languages.
Employers placed the most importance on Customer Service and Security skills among topics surveyed in the area of Business System Development skills. UAM graduates scored the highest in these two categories, but the majority in all categories was the ranking of “Average”. The School of CIS needs to continue to seek opportunities to require students to exercise these skills as they progress through the CIS curriculum.
Appendix I

2014 Alumni Day Program

School of Computer Information Systems
Faculty for the
School of
Computer Information Systems

Mr. Brian Hairston, Dean
Ms. Terri Cossey
Ms. Karen Donham
Ms. Lynn Harris
Ms. Jean Hendrix
Ms. Angela Marsh
Ms. Lori Selby

Adjunct Instructor

Mr. Bryan Fendley

University of Arkansas at Monticello
School of
Computer Information Systems
Presents
CIS Alumni Day
March 14, 2014
8:00 a.m. – 12:00 p.m.
Babin Business Center Room 104
CIS Alumni Day Activities

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:10-9:00</td>
<td>Cindy Adair, UAM IT Department</td>
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<tr>
<td></td>
<td>Corey Keaton, Gartman Systems</td>
</tr>
<tr>
<td>9:10-10:00</td>
<td>Hayley Norris Russell, Murphy Oil</td>
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<tr>
<td></td>
<td>Antonio Williams, Murphy Oil</td>
</tr>
<tr>
<td>10:10-11:00</td>
<td>Ainslee Sikole, FIS Global</td>
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<td></td>
<td>Kevin Stewart, Collective Bias</td>
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<tr>
<td>11:10-12:00</td>
<td>Kashif Kincaid, Dumas Public Schools</td>
</tr>
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<td></td>
<td>Chris Simpson, Entergy</td>
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</tbody>
</table>

Cindy Adair, Administrative Systems Developer/Analyst for the UAM IT Department
Cindy graduated from the University of Arkansas at Monticello in 1996 with a BS in Computer Information Systems. She supports the Human Resources side of the PeopleSoft system on campus. Her job includes creating queries within the PeopleSoft application, writing programs for new projects, researching/fixing problems that occur within the system and researching/testing new processes to be implemented.

Corey Keaton, Mobile Apps Developer for Gartman Systems
Corey graduated from the University of Arkansas at Monticello in December 2013 with a BS in Computer Information Systems. His job focus is the iOS devices with Objective C as the primary language. He is currently working on a Customer Relationship Management App that is very near completion.

Hayley Norris Russell, Systems Administrator for Murphy Oil
Hayley graduated from the University of Arkansas at Monticello in May 2010 with a BS in Computer Information Systems. She is assigned to the User Support group, which is responsible for troubleshooting all laptops, desktops, and mobile devices used by corporate employees. Hayley manages over 750 devices through AT&T, Sprint, and Verizon.

Antonio Williams, Support Center Agent for Murphy Oil
Antonio graduated from the University of Arkansas at Monticello in May 2009 with a BS in Computer Information Systems. At Murphy Oil, he provides computer and network support for over 1200 stores across the United States and works with third-party vendors.

Ainslee Sikole, Technology Business Consultant II for FIS Global
Ainslee graduated from the University of Arkansas at Monticello in May 2011 with a BS in Computer Information Systems. She joined FIS Global immediately following graduation and is now a client trainer for the Automotive Finance Department.

Kevin Stewart, Analytics Coordinator for Collective Bias
Kevin graduated from the University of Arkansas at Monticello in December 2012 with a BS in Computer Information Systems. He creates and maintains social media tracking profiles, analyzes content for insights and opportunities, informs clients on social trends, and correlates social media content to sales.

Kashif Kincaid, Network Engineer for Dumas School District
Kashif graduated from the University of Arkansas at Monticello in May 2012 with a BS in Computer Information Systems. He manages several aspects of the school district's network, including their servers, Internet, traffic flow, firewall security, back-ups, and Wi-Fi. He also serves as the Network Administrator for First Baptist Church in Monticello.

Chris Simpson, IT Consultant for Entergy
Chris Simpson graduated from the University of Arkansas at Monticello in 2005 with a BS in Computer Information Systems. Chris maintains Entergy's cyber security and regulatory compliance program across their multiple business units. He works with business units to ensure devices have been properly hardened and security solutions are in place and active and performs continual proactive security reviews of controlled process environments to identify and resolve potential vulnerabilities. He also works with management and external entities to facilitate audits and technical projects.
Appendix J

Local schools visit campus for lesson in using Microsoft PowerPoint.

Photo: Mrs. Susan Stark’s kindergarten class, Monticello Elementary

December 3, 2013

School of Computer Information Systems
Appendix K

2013 - 2014 Non-traditional Course Offerings

School of Computer Information Systems
# School of Computer Information Systems

## 2013 - 2014 Course Offerings

(Number of sections for each semester)

<table>
<thead>
<tr>
<th>Course</th>
<th>Intersession 13</th>
<th>Su I 13</th>
<th>Su II 13</th>
<th>Fall 13</th>
<th>Spr 14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blackboard</strong></td>
<td></td>
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<tr>
<td>Seminar: Computers in Changing Society</td>
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<td>-</td>
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<tr>
<td>Seminar: New Perspectives on the Internet</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>Programming Logic &amp; Design</td>
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<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
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<tr>
<td>Microcomputer Applications</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Advanced Microcomputer Applications</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Business Database Management System</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Ethics in Information Technology</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
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<tr>
<td><strong>Colleges of Technology</strong></td>
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<tr>
<td>Introduction to Computers – Crossett</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
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<tr>
<td>Introduction to Computers – McGehee</td>
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<td>-</td>
<td>-</td>
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<td>1</td>
</tr>
<tr>
<td>Microcomputer Applications - Crossett</td>
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<tr>
<td><strong>Monday-Wednesday 1:10-2:30pm</strong></td>
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<tr>
<td>Data Communications &amp; Networking</td>
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<tr>
<td><strong>Hybrid (Online &amp; Lab)</strong></td>
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<tr>
<td>PC Hardware/Software Maintenance</td>
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Appendix L

2014 Scholarship Data

School of Computer Information Systems
## 2014 School of CIS Awards Distributed

<table>
<thead>
<tr>
<th>Scholarship Funding</th>
<th>Amount Awarded</th>
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<tbody>
<tr>
<td>Hornaday Scholarship</td>
<td>$1088 for 2014-2015 academic year</td>
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<tr>
<td>Austin Scholarship</td>
<td>$1130 for 2014-2015 academic year</td>
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<tr>
<td>Roiger Scholarship</td>
<td>$944 for 2014-2015 academic year</td>
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<tr>
<td>CIS General Scholarship Fund</td>
<td>$100 for Fall 2014</td>
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<td></td>
<td>$100 for Fall 2014</td>
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<tr>
<td></td>
<td>$100 for Fall 2014</td>
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<tr>
<td></td>
<td>$450 for Fall 2014</td>
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<td>$500 for 2014-2015 academic year</td>
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<td>$500 for 2014-2015 academic year</td>
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<td>$500 for 2014-2015 academic year</td>
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<td>$500 for 2014-2015 academic year</td>
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<tr>
<td></td>
<td>$700 for 2014-2015 academic year</td>
</tr>
<tr>
<td></td>
<td>$700 for 2014-2015 academic year</td>
</tr>
<tr>
<td>Roiger Chi Iota Sigma Scholarship Fund</td>
<td>$100 book stipend for Fall 2014</td>
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<td></td>
<td>$100 book stipend for Fall 2014</td>
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<td>$100 book stipend for Fall 2014</td>
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<td>$100 book stipend for Fall 2014</td>
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<tr>
<td></td>
<td>$100 book stipend for Fall 2014</td>
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</tbody>
</table>

20 Students awarded scholarships

$8,862 in total scholarships awarded