

**Department of Computer Science
University of West Florida**

**Assessment Summary
Fall 2008 – Spring 2009**

The Department of Computer Science has three ongoing assessment initiatives for its undergraduate programs and graduate programs, and academic foundations course. This document includes an executive summary of the department's assessment initiatives, and the undergraduate, graduate, and academic foundations assessment materials in Appendix A. Appendices B, C, and D include the data collected from the 2008 – 2009 academic year for the undergraduate, graduate, and academic foundations assessment.

1. Undergraduate Assessment Summary

With the launch of the new Computer Science undergraduate programs in fall 2008, new assessment materials were developed for the new curricula. A new undergraduate Academic Learning Compact (ALC) was developed that includes a common set of learning outcomes for all undergraduate program specializations, specific learning outcomes unique to each of the three specializations: Computer Information Systems (CIS), Computer Science (CS), and Software Engineering (SE), and job prospects for all computer Science students. Curriculum matrices were then developed for each of the specializations that denote courses in which each program outcome is introduced, reinforced, mastered, and assessed. The capstone courses were selected for embedded assessments: CIS4592 Capstone Research Experience, which is a required course for CS students, will be used for assessing the CS specialization, and CIS4595C Capstone Systems Project, which is a required course for CIS and SE students, will be used for assessing those specializations. The assessment worksheet used for collecting assessment data was also revised to reflect the new program outcomes.

The undergraduate Academic Learning Compact (ALC) outlines the learning outcomes for Computer Science students organized in five main domains: content, critical thinking, communication, integrity/values, and project management. The Computer Science ALC document is available at http://uwf.edu/cutla/ALC/Comp_Sci_ALC.pdf. Student learning outcomes for all five domains were assessed in the 2008 – 2009 academic year.

Assessment Methods

The outcomes were assessed using embedded assignments in the capstone courses CIS4592 Capstone Research Experience and CIS4595C Capstone Systems Project. Students worked on assignments based on departmental standards, and the results of their learning was represented in programming projects, written reports, and/or presentations. The instructors used explicit criteria to evaluate these student assignments using the Undergraduate Assessment Worksheet, shown in Appendix A each semester to report the extent to which students achieved student learning outcomes. Annually, the data collected from the worksheets is analyzed and summarized by the departmental assessment committee. The committee then reports to the department including recommendations for appropriate actions to improve achievement of student learning outcomes

and/or the assessment process. The department reports assessment results to the university and accreditation committees as necessary. All data is reviewed as part of the Computer Science program review.

Summary of Assessment Results

The completed assessment worksheets from CIS4592 Capstone Research Experience and CIS4595C Capstone Research Project for fall 2008 and spring 2009 are included in Appendix B. The completed worksheets include all recommendations made by instructors for improving the course and/or assessment process. Since the new program outcomes and ALC were being developed during this academic year, not all outcomes were assessed this year. The outcomes that matched up with this year's course objectives for the Capstone courses were assessed, with the goal of assessing all program-level student learning outcomes over a three-year period.

Summary of Assessment Data for Computer Science Specialization (CIS4592 Capstone Research Experience)

In this course, all students met the expectations for program outcome Content-1. 60% of the students *Met Expectations* for Content-2, and 40% of the students *Exceeded Expectations* for Content-2. Content-3, -4, and -5 were not assessed in this course for this year.

All students *Met Expectations* for the Critical Thinking learning outcomes.

60% of the students *Met Expectations* for Communications-1, and 40% of the students *Exceeded Expectations* for Communications-1. 40% of the students *Met Expectations* for Communications 2, and 40% exceeded the expectations for Communications-2. 20% of the students failed to meet the expectations for Communications-2.

Integrity/Values-1 was not assessed in this course. 60% of the students *Exceeded Expectations* for Integrity/Values-2 and 40% *Met Expectations* for Integrity/Values-2.

For Project Management-1, 40% of the students *Met Expectations*, 40% of the *Exceeded Expectations* and 20% *Failed to Meet Expectations*. Project Management-2 was not assessed.

Summary of Assessment Data for Computer Information Systems Specialization (CIS4595C Capstone Systems Project)

For this course, all students *Met Expectations* for the following program outcomes: Content 1 – 4, Critical Thinking, Communication, Integrity/Values, and Project Management. Content-5 was not assessed since there were no operating system projects in this course.

Summary of Assessment Data for Software Engineering Specialization (CIS4595C Capstone Systems Project)

Since the Software Engineering specialization was just launched in fall 2008, no Software Engineering students were enrolled in the Capstone course this year thus no assessment data was collected for the Software Engineering specialization this year. Data will be collected and summarized once the first group of software engineering students advance through the program and enroll in the Capstone course.

Recommendations

The first year of assessment of the new undergraduate programs was successful. New assessment materials, including the ALC, assessment worksheet, and curriculum matrices were developed to reflect the new curricula. The assessment process was implemented by identifying the appropriate courses for using embedded assessments and collecting the necessary assessment data. The summary of assessment data indicates that the new undergraduate programs are enabling students to achieve the learning outcomes identified in the Academic Learning Compact. The recommendations for next year are to continue with the second year of data collection, and then refine the assessment process as necessary. Data for the Software Engineering specialization should be collected and analyzed next year if any Software Engineering students complete the Capstone course, CIS4595C Capstone Research Project.

2. Graduate Assessment Summary

The graduate Academic Learning Plan (ALP) outlines the learning outcomes for our students organized in five main domains: content, critical thinking, communication, integrity/values, and project management. The Computer Science ALP is available at http://www.uwf.edu/cutla/ALP/Computer_Sci_ALP.pdf. Student learning outcomes for all five domains were assessed in the 2008 – 2009 academic year.

Assessment Methods

The outcomes are assessed using embedded work in the graduate project and thesis courses for the Computer Science and Software Engineering programs, COT6931 Computer Science Project and CIS6971 Thesis. A rubric was developed and used for assessing learning outcomes in these courses. Students work on projects or theses according to departmental requirements, and the results of their work are represented in project artifacts, completed theses, software systems, written reports, and/or presentations. Each project or thesis advisor evaluates their students' work using the Graduate Rubric for Assessment of the ALP contained in Appendix A. Annually, the department assessment committee evaluates and summarizes this data in a report presented to the department. The department takes appropriate actions to improve achievement of student learning outcomes or assessment process. The department reports assessment results to the university and accreditation committees as necessary. All assessment data is also reviewed as part of the Computer Science program review.

Summary of Assessment Results

The completed rubrics from our two-semester courses—COT6931 Computer Science Project and CIS6971 Thesis for fall 2008 and spring 2009 are included in Appendix C. The completed rubrics include all recommendations made by the instructors for improving the courses and/or assessment process. There were 13 students assessed over the two-semester period. During the fall term there were 5 students in the second semester of their project or thesis, and 6 students in the first semester of their project or thesis. During the spring 2009 semester there were 5 students in the second semester of their project or thesis, and 2 students in the first semester of their project or thesis.

Compiled assessment data for fall 2008 and 2009 data are shown in Table 1. The rubric permits instructors to evaluate students' performance on a 5-point scale (0 to 4) where scores of 3 or 4 indicate that a student *Meets* or *Exceeds Expectations*. Instructors are permitted to enter an n/a for criteria not applicable during a specific term. The table contains three values in each intersection: (1) the average value for that criterion, (2) the total numerical value for that rubric criterion, and (3) the number of n/a entries contained within parentheses if applicable for that criterion.

Individual scores were 3, 4, or n/a for all students in all criteria with the exception of one score of 2 which represents *Below Expectations* for one student in the use of relevant APA style. The averages of student scores for achievement of student learning outcomes are 3.000 or better for all criteria.

Table 1. Summary of Graduate Assessment Data, 2008 – 2009

Criteria	Total Average Score n=18	Fall 2008 averages for 2 nd semester of project or thesis n=5	Fall 2008 averages for 1 st semester of project or thesis n=6	Spring 2009 averages for 2 nd semester of project or thesis n=5	Spring 2009 averages for 1 st semester of project or thesis n=2
Content -Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	3.412 58 (1 n/a)	3.000 12 (1 n/a)	3.333 20	3.800 19	3.500 7
Content -Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	3.555 64	3.200 16	3.833 23	3.800 19	3.000 6
Critical Thinking -Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	3.444 62	3.200 16	3.500 21	3.800 19	3.000 6
Written -Organization and logic	3.833 69	4.000 20	3.833 23	3.800 19	3.500 7
Written -Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	3.778 68	4.000 20	3.667 22	3.600 18	4.000 8
Written -Use of relevant APA Style (Title page, citations & references, use of language, etc.)	3.688 59 (2 n/a)	3.600 18	3.750 15 (2 n/a)	3.600 18	4.000 8
Oral -Communication skills during presentation	3.692 48 (5 n/a)	4.000 20	3.500 7 (4 n/a)	3.500 14 (1 n/a)	3.500 7
Integrity/Values -Clear understanding of and adherence to scientific and professional ethics.	3.944 71	4.000 20	4.000 24	3.800 19	4.000 8
Project Management -Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	3.889 70	4.000 20	3.833 23	3.800 19	4.000 8

Recommendations

Our evaluation of this data is that our graduate programs are meeting the objectives of our Academic Learning Plan. However, as the data was sorted it was realized that data wasn't collected for students who started their project during the 2008 summer semester. A recommendation for next year is to collect assessment data for students enrolled in project or thesis courses during the summer semester.

3. Academic Foundations Assessment Summary

The Computer Science department offers one General Studies course, CGS2060 Excursions in Computing. From the Academic Foundations matrix, student learning outcomes from the project management and communication domains were selected for assessing student learning outcomes in this course. More information on the Academic Foundations assessment plan is available at http://www.uwf.edu/cutla/acad_foundations.cfm.

Academic Foundations Domains Addressed in 2008 – 2009 and Corresponding Student Learning Outcomes

A. Project Management

PM-1: Content is complete

PM-2: Delivers product on time

B. Communication

Speaking-1: Organization and logic of message

Speaking-2: Clarity of message

Assessment Methods

The outcomes were assessed using embedded assignments in the Computer Science General Studies course, CGS2060 Excursions in Computing. A rubric was developed for assessing the outcomes in this course. Students completed assignments according to the course requirements, and the results of their work were reported through the development and delivery of an oral presentation. The oral presentation is given during scheduled class time and attendance is required by all students. The course instructor evaluated students' work using the rubric. The rubric is provided to the students prior to developing and presenting their presentations. Annually, the course instructor or coordinator report assessment data to the department. The department takes appropriate actions to improve the achievement of student learning outcomes or assessment process. The department reports assessment results to the university and accreditation committees as necessary. All data is reviewed as part of the Computer Science program review.

Summary of Assessment Results

The completed rubrics from CGS2060 Excursions in Computing for fall 2008 and spring 2009 are included in Appendix D. The completed rubrics include any recommendations made by the instructors for improving the course or assessment process.

Consistently in the three assessment worksheets, the majority of the students *Exceed Expectations* in both of the assessed Communication learning outcomes. For Project Management, the majority of the students *Met Expectations*. Overall, the majority of students either *Met* or *Exceeded Expectations*.

Recommendations

The incorporation of assessing project management and communication into CGS2060 with an ongoing project has blended well with the course material and assignments. The student presentations, used for assessment, are given at the end of the course and are a required component of final grade calculations. The only recommendation noted at this time is in terms of course content. It is recommended that prior to students designing their presentations, that material is covered in the course on the visual design of effective presentations for delivery to a large group. Consideration of items such as font size and color choices will improve the quality of student presentations.

Appendix A: Assessment Materials for 2008 – 2009

Undergraduate Assessment Materials

Academic Learning Compact (ALC)
Assessment Worksheet
CIS Curriculum Matrix
CS Curriculum Matrix
SE Curriculum Matrix

Graduate Assessment Materials

Academic Learning Plan (ALP)
Assessment Rubric

Academic Foundations Assessment Materials

Assessment Worksheet
Assessment Rubric

COMPUTER SCIENCE

Mission Statement

The mission of the Department of Computer Science is to provide a high-quality, student-oriented educational experience to our undergraduate and graduate students. The department prepares students for successful computing careers by empowering them with the knowledge and skills to contribute responsibly and creatively to a complex and ever-changing world, and to continue professional development and life-long learning.

The Department of Computer Science offers a Bachelor's of Science in Computer Science degree with three programs of specialization: Computer Science, Computer Information Systems, and Software Engineering.

Program Descriptions

Computer Information Systems

The Computer Information Systems (CIS) program emphasizes analytical thinking and problem solving from an applications development perspective. This program builds strong programming skills and prepares students for successful careers in the Computer Information Systems fields.

Computer Science

The Computer Science (CS) program emphasizes analytical thinking and problem solving involving scientific applications. Concentration areas include artificial intelligence, distributed software architecture, net-centric computing, programming languages, and security.

Software Engineering

The Software Engineering (SE) program incorporates theoretical foundations of computer science with the study of principles and practices regarding the development of high-quality software systems that meet client needs. This specialization places emphasis on the development of complex, large-scale software systems, software process, and project management.

Student Learning Outcomes

Student learning outcomes for Computer Science students are listed below. Content outcomes are specific to each program, and all other outcomes are common to all four programs.

UWF Computer Science graduates should be able to do the following:

Content

Specialization	Outcomes
Computer Information Systems	<ul style="list-style-type: none">• Identify and use concepts, principles, and theories of modern programming languages for the development of computer programs• Analyze, design, develop, and manage information systems using appropriate tools and techniques• Describe major software engineering models and processes• Model, design, and manage database products• Configure and manage operating systems and networks
Computer Science	<ul style="list-style-type: none">• Identify and use concepts, principles, and theories of computing and modern programming languages for the development of computer programs• Compare and evaluate data structures and algorithms to solve scientific problems• Describe the interactions of hardware and software for the interoperability of computer and network resources• Employ object-oriented programming strategies that facilitate code reuse and maintainability
Software Engineering	<ul style="list-style-type: none">• Identify and use software engineering concepts, principles, and theories in the analysis, design, implementation, and testing, and maintenance of computer systems• Apply procedural and object-oriented programming skills in the development of high-quality software systems• Research and use emerging software engineering technologies in software development• Articulate the relationship between software engineering process improvement and software quality

Critical Thinking

- Employ computing strategies to analyze and develop computer systems
- Identify and formulate computing solutions for various problems

Communication

- Create and deliver effective oral presentations and written reports
- Communicate using appropriate tools and technologies

Integrity/Values

- Describe ethical issues in computing contexts

- Articulate the responsibilities of a computing professional

Project Management

- Employ effective project management skills to develop a project plan, monitor, and track development efforts through design, implementation, and testing of the computer system
- Work as part of a team in the development of computer systems

Evaluation of Student Learning Outcomes

Students pursuing undergraduate Computer Science degrees will demonstrate skills specific to their specialization. Several upper level courses will give you the opportunity to identify and reflect on your content, critical thinking, communication, integrity, and project management skills through the completion of assignments that meet departmental standards and integrate what you have learned. Opportunities to showcase your work will become available as your study progresses, and these include the opportunity to participate in undergraduate research projects with faculty, or to present the results of your work at university or external events.

Job Prospects for Computer Science Graduates

Programmer	Network administrator
Computer scientist	Network programmer
Systems designer	Applications programmer
Software engineer	Database administrator
Software consultant	Database developer
Software systems tester	Data analyst
Software development project manager	Application systems analyst
Embedded systems programmer	Business requirements analyst
Forensics specialist	Operations manager
Scientific engineer/programmer	Network manager
Systems architect	Project manager
Web architect	Web developer

Find Out More about Computer Science at UWF:

www.cs.uwf.edu

Student Learning Outcomes Undergraduate Assessment Worksheet

Department of Computer Science
University of West Florida

1. (a) Course name and number: _____ (b) Semester: _____
2. (a) Instructor(s): _____ (b) Number of sections: _____
3. Assessment for (check all programs that apply): _____ CIS _____ CS _____ SE
4. (a) Initial course enrollment: _____ (b) Number of students who completed course: _____
5. For each student learning outcome assessed in the course, please describe how that outcome was assessed (assessment measure), and indicate the **number and percentage** of students who exceeded, met, or failed to meet expectations. **Use the number of students who completed the course** (indicated in item 4(b) above) to calculate the percentages. For learning outcomes that were not assessed in this course offering, indicate N/A.

Learning outcomes listed in the first column are defined in the Computer Science Academic Learning Compact (ALC) available at http://uwf.edu/cutla/ALC/Comp_Sci_ALC.pdf.

Student Learning Outcome	Assessment Measure	Exceeded Expectations	Met Expectations	Failed to Meet Expectations
[Sample row]	Research paper	10/20 (50%)	6/20 (30%)	4/20 (20%)
Content – 1				
Content – 2				
Content – 3				
Content – 4				
Content – 5				
Critical thinking – 1				
Critical thinking – 2				
Communication – 1				
Communication – 2				

Integrity/values – 1				
Integrity/values – 2				
Project management – 1				
Project management – 2				

6. Recommendations to improve or update student learning outcomes or assessment measures, if any:

Instructor(s) Signature

Date

Department of Computer Science

Program: Computer Information Systems

Curriculum Matrix

(Relationship of required courses to program outcomes, as specified in the Academic Learning Compact.*)

Course	CO1	CO2	CO3	CO4	CO5	CT1	CT2	CM1	CM2	IV1	IV2	PM1	PM2
COP3022 Intermediate Prog	I					I	I			I	I		
CEN3031 SE I			I				I			I	I	I	I,R
COP4710 Database Systems				I,R			I			I	I		
COT3100C Discrete Structures										I	I		
COP4027C Advanced Computer Prog	R					R	R			R	R		
CEN4721 HCI							I			I	I		
CIS3512 Soft Doc								I,R	I	I	I		
COP4610C OS					I,R					R	R		
CEN 3032 SE II			R				I			R	R	R	R
CEN4400 OR									R,M	R	R		
COP3813 Internet Prog						R				R	R		
CIS4007C Networking					I,R					R	R		
COP4814 Net Centric		I,R				R	R			R	R		
CIS 4595C Capstone	M,A												

*ALC is available at http://uwf.edu/cutla/ALC/Comp_Sci_ALC.pdf.

Heading row lists outcome categories: Content (CO), Critical Thinking (CT), Communication (CM), Integrity/Values (IV), and Project Management (PM). Outcome numbers listed follow the same outcome ordering in the ALC.

Entries in the table cells identify where each program outcome is Introduced (I), Reinforced (R), Mastered (M), and Assessed (A).

Department of Computer Science

Program: Computer Science

Curriculum Matrix

(Relationship of required courses to program outcomes, as specified in the Academic Learning Compact.*)

Course	CO1	CO2	CO3	CO4	CT1	CT2	CM1	CM2	IV1	IV2	PM1	PM2
COT3011 Alg & Program Design	I	I			I	I		I	I	I	I	
COP3411 DS & Alg I	R	R	I		R	R		R	I	I	I	
COP4412 DS & Alg II	R	M	I		R	R		R	I	I	I	
CDA3101 Comp Org	I	I	I		I	I		R	I	I		
COP4331 OO Prog	R	R		I,R	M	M		R	R	R	R	I,R
COP4020 PL	M	M		M,A	M	M		R	R	R		
COP4634 Sys & Net I	M	M	R		M	M	R	R	R	R		
COP4635 Sys & Net II	M	M	M,A		M	M	R	R	R	R	M	
COT4420 Th of Comp	M				M	M		R	R	R	M	
CIS4592 CS Capstone	A	A			A	A	M,A	M,A	M,A	M,A	M,A	M,A
CIS3512 Soft Doc							I,R	I,R	I,R	I,R		

*ALC is available at http://uwf.edu/cutla/ALC/Comp_Sci_ALC.pdf.

Heading row lists outcome categories: Content (CO), Critical Thinking (CT), Communication (CM), Integrity/Values (IV), and Project Management (PM). Outcome numbers listed follow the same outcome ordering in the ALC.

Entries in the table cells identify where each program outcome is Introduced (I), Reinforced (R), Mastered (M), and Assessed (A).

Department of Computer Science Program: Software Engineering

Curriculum Matrix

(Relationship of required courses to program outcomes, as specified in the Academic Learning Compact.*)

Course	CO1	CO2 ¹	CO3	CO4	CT1	CT2	CM1	CM2	IV1	IV2	PM1	PM2
CDA3101 Computer Org.					I	I						
CEN3031 SE 1	I		I	I								
CEN3032 SE 2	R		R, M	R			R, M	R, M			I	I, R
CEN4721 HCI					R	R						
CEN4054 SE Mgmt				M					R	R	R	
CIS3512 Software Documentation	I						I	I	I	I		
CIS4327C Capstone Project	M, A	M, A	A	A	M, A	A	A	M, A	M, A	M, A	M, A	M, A
CIS4385 Cyber-Security Forensics												
CNT4007C T&F Networks					R	R						
COM4110 Bus & Prof. Comm.							R, M	R, M				
COP3411 Data Structs & Algs. I		I			R	I						
COP4412 Data Structs & Algs. II		R			R	R						
COP4610C T&F OS					R	R						
COP4653 Embedded/Wireless Sys					R	R						
COP4710 Database Systems					R	R						
COT3011 Alg. & Prog. Design					I							
MAN 3240 Behavior in Orgs											I, R	I, R

*ALC is available at http://uwf.edu/cutla/ALC/Comp_Sci_ALC.pdf.

¹This outcome is only partially addressed in the current curriculum: procedural programming skills are being addressed but not object-oriented skills. This will be fixed with a program CCR to be submitted during Summer 2009.

Heading row lists outcome categories: Content (CO), Critical Thinking (CT), Communication (CM), Integrity/Values (IV), and Project Management (PM). Outcome numbers listed follow the same outcome ordering in the ALC.

Entries in the table cells identify where each program outcome is Introduced (I), Reinforced (R), Mastered (M), and Assessed (A).

MASTER OF SCIENCE IN COMPUTER SCIENCE

Mission Statement

The mission of the Department of Computer Science is to provide a high-quality, student-oriented educational experience to undergraduate and graduate students in the Northwest Florida region. The department prepares students for successful careers in computing by empowering them with the knowledge and skills to contribute responsibly and creatively to a complex and ever-changing world, and to continue professional development and life-long learning.

Student Learning Outcomes

The Computer Science Department offers a Master of Science program in Computer Science with two specializations: Computer Science (CS) and Software Engineering (SE). Upon successful completion of the graduate program, students will be able to do the following:

Content

- Describe, compare, and evaluate at an expert level one or more contemporary topics of specialization in modern computing
- Apply computing principles to a specific problem domain (e.g., medical software, high-performance computing)
- (For students who choose the CS specialization) Develop and analyze relevant algorithms and their efficient implementation in a variety of environments
- (For students who choose the SE specialization) Explain and adapt to the software life cycle, including communicating with users, developing requirements, testing and deploying systems, and managing the whole of the Software Engineering process

Critical Thinking

- Identify and analyze alternate approaches to solving computing problems
- Implement and analyze relevant algorithms in a variety of environments

Communication

- Employ effective and professional technical writing skills
- Present summary of thesis or project results using appropriate technologies

Integrity/Values

- Identify ethical issues and responsibilities within the computing profession

Project Management

- Conceive, plan, organize and execute a significant months-long project in computing
- Collaborate with team members where appropriate and defend results and outcomes at the end of the project timeline

Evaluation of Student Learning Outcomes

Computer Science graduate students will acquire advanced skills and knowledge that enable them to join the computing profession or continue a path of higher education towards a doctoral degree. They will gain expertise through courses in their chosen area of specialization: Computer Science or Software Engineering. They will be assessed in a capstone experience, thesis or project, which is required at the end of their program of study. The capstone requirement allows students to demonstrate an integrative grasp of the outcomes by developing a research thesis or software system of appropriate complexity that must abide by ethical standards and make a creative contribution to the field.

Career Paths and Job Prospects

Computer Scientist	Software Engineer
Project Manager	Software Consultant
Senior Programmer / Analyst	Systems Engineer
Network Administrator	Requirements Engineer
Database Administrator	Software Quality Assurance Engineer
Computing Researcher	Advanced Graduate Studies

For more information on the Computer Science Master's Program at UWF, please visit:

<http://www.cs.uwf.edu/>

Computer Science Rubric for Assessment of ALP Based on Graduate Thesis or Project

Student Name: _____ Course: _____ Semester: _____ Supervisor: _____
 Assessment of: _____ first semester _____ second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is appropriately documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	
Student strengths:						
Student weaknesses:						

Student Learning Outcomes Assessment Worksheet – Academic Foundations

**Department of Computer Science
University of West Florida**

Course name and number: _____ Semester: _____

Instructor: _____ Coordinator: _____
(for multiple-section courses)

Number of sections of the course: _____

Initial course enrollment: _____ Final course enrollment: _____

For each student learning outcome, describe how that outcome was assessed (assessment measure), and indicate number and percentage of students who exceeded, met, or failed to meet expectations. Use the number of students who completed the course to calculate the percentages.

Student Learning Outcome	Assessment of Outcome	Exceeds Expectations	Meets Expectations	Fails to Meet Expectations
PM-1: Content is complete				
PM-2: Delivers product on time				
Speaking-1: Organization and logic of message				
Speaking-2: Clarity of message				

Recommendations to improve or update student learning outcomes or assessment measures, if any: _____

Instructor's Signature

Date

Rubric for Assessment of Student Presentations

Student Name: _____

Course: CGS2060: Excursions in Computing

Semester: _____

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Project Management						
Content completeness	Presentation does not meet stated criteria or does not include any of the required items	Presentation contains few of the required items or has many omissions of information	Presentation contains most required items with only some omissions of information. Additional information would have clarified aspects of the presentation	Presentation contains all required items with only slight omissions of information. Additional information would have clarified aspects of the presentation	Presentation contains all required items. No obvious omissions of information	
On-time product delivery	Presentation was more than 120 seconds over or under the timing restrictions	Presentation was more than 90 seconds over or under the timing restrictions	Presentation was more than 60 seconds over or under the timing restrictions	Presentation was more than 30 seconds over or under the timing restrictions	Presentation was delivered within the timing restrictions	
Speaking						
Organization and logic	Presentation lacked a logical pattern and the message was presented as a collection of disorganized items	Presentation either lacked a logical pattern or the message was presented as a collection of disorganized items	Presentation had underlying flow, but did not stick to logical pattern. Message was presented in disorganized form with occasional moments of organization	Presentation followed a pattern with only slight deviations from logical order. Message was presented in organized form with few instances of divergence from the organizational structure	Presentation followed a logical pattern from beginning to end. Message was presented in organized form with no divergence from the organizational structure	
Clarity	Student was either not heard or not understood by audience members. Self-questioning was the	Student was often not easily heard or understood by most audience members. Many instances	Student was sometimes not easily heard or understood by many audience members. Some	Student was easily heard and understood by most audience members. Few instances of self-	Student was easily heard and understood by all audience members. No instances of self-	

	standard. Audience questions could not be answered or were answered ungraciously	of self-questioning were noted. Audience questions were either answered incorrectly or ungraciously	instances of self-questioning were noted. Audience questions were either answered incorrectly or ungraciously	questioning were noted. Most audience questions were answered graciously and with authority	questioning were noted. Audience questions were answered graciously and with authority	
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Required Content: _____

Appendix B: Undergraduate Assessment Data for 2008 – 2009

This appendix includes assessment data collected from the following courses:

Fall 2008:

Capstone courses identified for embedded assessment are only offered in the spring.

Spring 2009:

CIS4592 – Capstone Research Experience

CIS4595C – Capstone Systems Project

Student Learning Outcomes Undergraduate Assessment Worksheet

Department of Computer Science
University of West Florida

7. (a) Course name and number: CIS4592 (b) Semester: Spring 2009
8. (a) Instructor(s): Huband (b) Number of sections: 1
9. Assessment for (check all programs that apply): CIS CS SE
10. (a) Initial course enrollment: 6 (b) Number of students who completed course: 5
11. For each student learning outcome assessed in the course, please describe how that outcome was assessed (assessment measure), and indicate the **number and percentage** of students who exceeded, met, or failed to meet expectations. **Use the number of students who completed the course** (indicated in item 4(b) above) to calculate the percentages. For learning outcomes that were not assessed in this course offering, indicate N/A.

Learning outcomes listed in the first column are defined in the Computer Science Academic Learning Compact (ALC) available at http://uwf.edu/cutla/ALC/Comp_Sci_ALC.pdf.

Student Learning Outcome	Assessment Measure	Exceeded Expectations	Met Expectations	Failed to Meet Expectations
[Sample row]	Research paper	10/20 (50%)	6/20 (30%)	4/20 (20%)
Content – 1	White papers		5/5 (100%)	
Content – 2	Final projects	2/5 (40%)	3/5 (60%)	
Content – 3	Not Assessed ¹			
Content – 4	Not Assessed ²			
Content – 5	N/A			
Critical thinking – 1	Final Projects		5/5 (100%)	
Critical thinking – 2	Final Projects		5/5 (100%)	
Communication – 1	Presentations	2/5 (40%)	3/5 (60%)	
Communication – 2	Presentations	2/5 (40%)	2/5 (40%)	1/5 (20%)

Integrity/values – 1	Not Assessed			
Integrity/values – 2	Status Reports ³	3/5 (60%)	2/5 (40%)	
Project management – 1	Status Reports	2/5 (40%)	2/5 (40%)	1/5 (20%)
Project management – 2	Not Assessed ⁴			

¹Interactions between hardware and software were not applicable to all projects.

²Object-oriented strategies were not applicable to all projects.

³Instead of having students articulate the responsibilities of computing professionals, I observed how well the students performed their assigned tasks (e.g., did they act responsibly by turning in the interim assignments without direct supervision). I also looked at the quality of their finished products.

⁴Due to the work schedules of our students, team projects were not feasible.

12. Recommendations to improve or update student learning outcomes or assessment measures, if any:

Jacalyn M. Huband
Instructor(s) Signature

8 May 2009
Date

Student Learning Outcomes Undergraduate Assessment Worksheet

Department of Computer Science
University of West Florida

13. (a) Course name and number: CIS4595C (b) Semester: 200901
14. (a) Instructor(s): Dr. Ed Rodgers (b) Number of sections: 1
15. Assessment for (check all programs that apply): CIS CS SE
16. (a) Initial course enrollment: 21: CIS 4, IT 17
(b) Number of students who completed course: 21: CIS 4, IT 17
17. For each student learning outcome assessed in the course, please describe how that outcome was assessed (assessment measure), and indicate the **number and percentage** of students who exceeded, met, or failed to meet expectations. **Use the number of students who completed the course** (indicated in item 4(b) above) to calculate the percentages. For learning outcomes that were not assessed in this course offering, indicate N/A.

Learning outcomes listed in the first column are defined in the Computer Science Academic Learning Compact (ALC) available at http://uwf.edu/cutla/ALC/Comp_Sci_ALC.pdf.

Student Learning Outcome	Assessment Measure	Exceeded Expectations	Met Expectations	Failed to Meet Expectations
Content – 1	Project proposal, deliverables and final project report		4/4 100%	
Content – 2	Project proposal, deliverables and final project report		4/4 100%	
Content – 3	Project proposal, deliverables and final project report		4/4 100%	
Content – 4	2 were DB projects		2/4 50%	
Content – 5	N/A - no OS or net projects			
Critical thinking – 1	Progress reports, project deliverables and final project report		4/4 100%	

Critical thinking – 2	Progress reports, project deliverables and final project		4/4 100%	
Communication – 1	Progress reports, project deliverables and final project		4/4 100%	
Communication – 2	Progress reports, project deliverables and final project		4/4 100%	
Integrity/values – 1	N/A			
Integrity/values – 2	Project proposal, professor/group interaction, progress reports		4/4 100%	
Project management – 1	Project proposal, professor/group interaction, progress reports		4/4 100%	
Project management – 2	Project activity		4/4 100%	

18. Recommendations to improve or update student learning outcomes or assessment measures, if any:

Dr. Ed Rodgers

Instructor(s) Signature

April 19, 2009

Date

Appendix C: Graduate Assessment Data for 2008 – 2009

This appendix includes assessment data collected from the following courses:

Fall 2008:

CIS6971 – Thesis

COT6931 – Computer Science Project

Spring 2009:

CIS6971 – Thesis

COT6931 – Computer Science Project

Student Name: Adrian Granados **Course:** CIS6971 **Semester:** Fall 2008 **Supervisor:** Sharon Simmons
Assessment of: ___x___ first semester ___ second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	4
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	4
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	4

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	4
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	4
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	4

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	4
Student strengths:						
Student weaknesses:						

Student Name: Darren Brock, Michelle Chamberlin, Amber Evanson, Walter Irvine **Course:** _COT6931 **Semester:** __Fall 2008

Supervisor: White **Assessment of:** _____ **first semester** **X** **second semester**

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	3
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	3
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	4
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	4
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	4

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	4
Student strengths:						
Student weaknesses:						

Student Name: Bradley Swain

Course: CIS6971

Semester: Fall 2008

Supervisor: Dr. El-Sheikh

Assessment of: first semester second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	3
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	4
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	4
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	4
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	N/A

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	4
Student strengths: Brad has demonstrated excellent critical thinking, programming, and project management skills in developing an integrated AI system to solve a complex, real-world solution.						
Student weaknesses: More work is recommended in expanding the literature survey and relating the proposed solution to existing literature. I also recommend developing a concrete plan for completing the writing and other thesis requirements to meet the spring semester deadlines.						

Student Name: Daniel Wells

Course: COT6931

Semester: Fall 2008

Supervisor: Dr. El-Sheikh

Assessment of: X first semester second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	3
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	4
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	4
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	3
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	N/A

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	4
Student strengths: Daniel has demonstrated excellent project management skills in coordinating a multi-faceted project that integrates concepts and methods from Computer Science, Artificial Intelligence, Image Processing, and Bioinformatics. Both the implementation and written requirements are proceeding according to the project plan.						
Student weaknesses: More work is recommended to identify appropriate literature, and establish the relationship between the work being done and existing literature.						

Student Name: John Carff

Course: COT6931

Semester: Fall 2008

Supervisor: Dr. El-Sheikh

Assessment of: X first semester second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	3
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	4
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
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Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
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Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	N/A
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	N/A

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Student strengths: John demonstrated excellent project management skills in working on the system implementation and written requirements of the project. He developed a research proposal which will be submitted for external funding, and will develop a summary paper during the second semester.						
Student weaknesses: More work is recommended to make the literature review more explicit and comprehensive.						

Student Name: Marco Arguedas **Course:** CIS6971 **Semester:** Fall 2008 **Supervisor:** Sharon Simmons
Assessment of: ___x___ first semester ___ second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
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Critical Thinking						
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Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
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Student strengths:						
Student weaknesses:						

Student Name: Nathan Williams **Course:** COT6931 **Semester:** Fall 2008 **Supervisor:** Sharon Simmons
Assessment of: ___x___ first semester ___ second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	3
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Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	4

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
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Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	3
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	n/a
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	n/a

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
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Integrity/Values						
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Student strengths:						
Student weaknesses:						

Student Name: __Johnnie Odom____ Course: _COT 6931____ Semester: __200808____ Supervisor: __Coffey____
 Assessment of: _____ first semester __X__ second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	n/a
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Critical Thinking						
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Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	4

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Student strengths: Good handling of a large, multifaceted, complex project. Good combination of research and implementation						
Student weaknesses: Technical writing to format specifications needs improvement						

Student grade: 30/32 = 94%

Student Name: Bradley Swain

Course: CIS6971

Semester: Spring 2009

Supervisor: Dr. El-Sheikh

Assessment of: ___ first semester ___X___ second semester

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Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	3
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	4
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	4
Student strengths: Brad has demonstrated excellent critical thinking and programming skills in developing an integrated AI system to solve a complex, real-world solution. He developed a novel solution for path understanding that incorporates a unique method of gathering a geospatial corpus of driving path descriptions. He wrote and submitted a paper to the premier conference in this field, the North American Chapter of the Association for Computational Linguistics (NAACL) 2009 Conference, which was accepted for publication. He also developed and presented a poster at SEASTARS 2009.						
Student weaknesses: Brad would benefit from better organizational and project management skills. Advisor made some suggestions to student to help prepare him for doctoral study.						

Student Name: Carlos Perez

Course: CIS6971 **Semester:** Spring 2009

Supervisor: Dr. El-Sheikh

Assessment of: X first semester second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	4
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	3
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
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Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	4
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	3

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<p>Student strengths: Carlos demonstrated excellent critical thinking and project management skills in formulating his thesis proposal and successfully presented it. His thesis work is very novel and involves collaboration with IHMC and Carnegie Mellon University. His objective is to evaluate two algorithms, GES and iMAGES, to find causal relationships among brain regions from fMRI data. He wrote and submitted a paper on the background work for his thesis to the 2009 Computers And Their Applications (CATA) Conference, which was accepted for publication. He also developed and presented two posters at SEASTARS 2009.</p>						
<p>Student weaknesses: More work is needed to explore and evaluate the algorithms identified in this work, and understand how they can be used effectively for the problem.</p>						

Student Name: John Carff

Course: COT6931

Semester: Spring 2009

Supervisor: Dr. El-Sheikh

Assessment of: _____ first semester X second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	4
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Critical Thinking						
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Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	4

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Integrity/Values						
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Project Management						
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<p><i>Student strengths: John demonstrated excellence in all components of the project. He developed a human-robot team navigation system and completed all implementation requirements. He wrote and submitted a paper to IROS (2009 IEEE/RSJ International Conference on Intelligent Robots and Systems). He developed and submitted a research proposal for external funding. He developed and presented a poster at SEASTARS 2009, which won the Best of Computer Science Award.</i></p>						
<p>Student weaknesses: None noted.</p>						

Student Name: Daniel Wells

Course: COT6931

Semester: Spring 2009

Supervisor: Dr. El-Sheikh

Assessment of: ___ first semester ___X___ second semester

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	4
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Critical Thinking						
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Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
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Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	4
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Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
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Student strengths: Daniel has demonstrated excellent project management skills in coordinating a multi-faceted project that integrates concepts and methods from Computer Science, Artificial Intelligence, Image Processing, and Bioinformatics. He developed an application for automated image processing of digestion x-radiographics in Stingrays. He wrote and submitted a paper to ICAI (2009 International Conference on Artificial Intelligence), which was accepted for publication. He developed and presented a poster at SEASTARS 2009.						
Student weaknesses: None noted.						

Student Name: Nathan Williams

Course: COT6931 **Semester:** Spring 2009

Supervisor: Sharon Simmons

Assessment of: _____ **first semester** ___X___ **second semester (student has received an I)**

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	3
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Critical Thinking						
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Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	n/a

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Student strengths:						
Student weaknesses:						

Student Name: Adrian Granados Murillo **Course:** CIS6971 **Semester:** Spring 2009 **Supervisor:** Sharon Simmons
Assessment of: _____ first semester X second semester (finishing this summer)

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
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Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	4
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	4
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	4

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	4
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	4
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	4
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	4

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	4
Student strengths:						
Student weaknesses:						

Student Name: *Joseph Brodersen* **Course:** *COT6931* **Semester:** *Spring 2009* **Supervisor:** *White*
Assessment of: **first semester** **second semester**

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Content						
Summarize, compare and evaluate, at an advanced level, concepts, research findings and current theories and models in core content areas of computer science.	Literature review in thesis or project is incomplete and/or omits important research findings or theoretical positions.	Literature review is incomplete and includes excessive discussion of unrelated issues and/or significant errors in content. Assertions are made without adequate support from evidence.	Literature review is brief, with insufficient detail. Unrelated issues are introduced and/or minor errors in content. Assertions made without adequate support from evidence.	Literature review is brief but complete; review focuses only on issues related to question; review is factually correct; assertions are clearly supported with evidence and appropriate use of logic.	Literature review is complete; sufficient detail is provided to support assertions; assertions supported with evidence; includes original and relevant insight or analysis of topic.	3
Identify computing principles and algorithms that are relevant to thesis or project topic and apply them within specific problem domain.	Unable to identify relevant computer science theories or algorithms.	Basic understanding of computing principles. Fails to apply them within specific problem domain.	Basic principles and techniques relevant to project or thesis are included, but some are missing. Fails to develop complete theoretical or design framework for thesis or project.	Provides good computing framework for thesis or project; applies principles and algorithms correctly to problem domain.	Project or thesis is completely grounded in computing theories and techniques. Applies them to problem correctly and clearly establishes their relevance.	3
Critical Thinking						
Evaluate and integrate computer science literature to address specific theory or practical problem. Describe and select appropriate scientific methods to answer question.	No clear research question or project posed. Relevance to existing literature and theory not established. Major errors in choice of research methods or analysis. Conclusions inconsistent with evidence presented.	Project/Question posed is of questionable relevance or has clearly been answered. Question unrelated to existing literature. Errors in choice, execution or interpretation of methods and/or data. Conclusions weakly justified by evidence.	Project is not very innovative. Question has been adequately answered in prior research; no clear rationale for reexamination of question given. Research and methods selected are flawed or inadequately carried out. Conclusions overreach evidence presented.	Meaningful question/project is posed, but may not be fully explicated. Research and methods selected appropriate for project. Conclusions follow logically from evidence presented.	Project addresses question or problem that is meaningfully connected to existing literature and theory. Student provides clear explanation of relationship. Research methods selected are appropriate for project. Conclusions follow logically from evidence presented.	3

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Communication						
Written: Organization and logic	No logical order to information provided.	Weak organization; sentences rambling; ideas repeated.	Minor problems of organization or logic; Needs work on creating transitions between ideas.	Presentation is organized, but does not present clear argument for research position/project rationale.	Clear and logical presentation; good development of argument/project rationale; transitions made clearly and smoothly.	3
Mechanics of writing (spelling, punctuation, grammar, clarity of writing)	Problems with mechanics of language serious enough to interfere with effective communication. Frequent errors in punctuation, spelling, sentence structure, etc.	Major problems with mechanics of language; Awkward sentence construction; poor or absent transitions; frequently difficult to understand.	Frequent problems with mechanics of language; Occasional awkward sentences and poor transitions reduce readability.	Infrequent and minor mechanical problems; Errors do not impair readability.	Clear, readable writing. Good use of transitions; no problems with spelling, punctuation, or grammar.	4
Use of relevant APA Style (Title page, citations & references, use of language, etc.)	No evidence APA style used.	Minimal use of APA style; frequent errors in all aspects of APA style.	Adequate use of APA style, but frequent errors in citations & references.	Infrequent errors in APA style; errors involve minor aspects of APA style – no errors in style for citations & references.	All relevant aspects of APA style used effectively and correctly.	4
Oral: Communication skills during presentation	Unable to respond effectively to questions posed by committee members.	Answers to several questions incomplete; needs frequent assistance from thesis/project advisor.	Answers to few questions incomplete; needs occasional assistance from thesis/project advisor.	Provides complete answers to questions posed. Presents thesis/project work in coherent manner.	Appropriate use of technology during presentation (where relevant). Presentation of thesis/project work is clear and well-organized. Responds to questions in poised, articulate, and professional manner.	4

Criteria & Points Assigned	Missing	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
	0	1	2	3	4	
Integrity/Values						
Clear understanding of and adherence to scientific and professional ethics.	Evidence of transgression of scientific, professional, or academic integrity.	Lack of understanding of scientific and professional ethics. Inadvertent violation of academic-conduct code.	Exhibits incomplete understanding but still complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Exhibits understanding and complies with principles of scientific, professional and/or academic integrity. Adherence is poorly documented.	Clear documentation of compliance with all relevant ethical guidelines. Clearly establishes authorship of thesis or project work.	4
Project Management						
Work individually, or as part of team where appropriate, to formulate, analyze, design, and implement a significant thesis, or computing project.	Unable to formulate project idea. No timeline constructed. Fails to meet most timeline goals. Implementation falls below expected minimum standards. Demonstrates lack of ability to function as part of team if applicable.	Problem formulation and solution contain numerous faults. Significant milestones in timeline not met. Implementation minimally meets expected standards. Unable to work effectively as team member if applicable.	Problem formulation and solution design contain some faults. Some milestones in timeline not met. Implementation exceeds minimal requirements but does not represent significant computing project. Demonstrates marginal effectiveness as team member if applicable.	Problem formulation and solution design contain no faults, but retain areas for significant improvement. Major milestones in timeline are met within acceptable timeframe. Implementation represents significant computing project with minor mistakes. Demonstrates effectiveness as team member if applicable.	Well-formulated, designed, and implemented project. Completes project according to timeline. Implementation represents significant computing project. Demonstrates effectiveness as team member if applicable.	4
Student strengths: Brodersen is a very creative and open to new concepts. He is also very well-organized in his research activities.						
Student weaknesses: None noted.						

Appendix D: Academic Foundations Assessment Data for 2008 – 2009

This appendix includes assessment data collected from our General Studies course.

Fall 2008:

CGS2060 – Excursions in Computing

Spring 2009:

CGS2060 – Excursions in Computing

Student Learning Outcomes Assessment Worksheet – Academic Foundations

**Department of Computer Science
University of West Florida**

Course name and number: CGS2060 Semester: Fall 2008

Instructor: Dennis Edwards Coordinator: Sharon Simmons
(for multiple-section courses)

Number of sections of the course: 2

Initial course enrollment: 23 Final course enrollment: 20

For each student learning outcome, describe how that outcome was assessed (assessment measure), and indicate number and percentage of students who exceeded, met, or failed to meet expectations. Use the number of students who completed the course to calculate the percentages.

Student Learning Outcome	Assessment of Outcome	Exceeds Expectations	Meets Expectations	Fails to Meet Expectations
PM-1: Content is complete	Presentation material	9	8	3
PM-2: Delivers product on time	Presentation delivery time	8	5	7
Speaking-1: Organization and logic of message	Presentation material	17	1	2
Speaking-2: Clarity of message	Presentation material	17	0	3

Recommendations to improve or update student learning outcomes or assessment measures, if any: _____

Instructor's Signature

Date

Student Learning Outcomes Assessment Worksheet – Academic Foundations

**Department of Computer Science
University of West Florida**

Course name and number: CGS2060 Semester: Fall 2008

Instructor: Sharon Simmons Coordinator: Sharon Simmons
(for multiple-section courses)

Number of sections of the course: 2

Initial course enrollment: 22 Final course enrollment: 18

For each student learning outcome, describe how that outcome was assessed (assessment measure), and indicate number and percentage of students who exceeded, met, or failed to meet expectations. Use the number of students who completed the course to calculate the percentages.

Student Learning Outcome	Assessment of Outcome	Exceeds Expectations	Meets Expectations	Fails to Meet Expectations
PM-1: Content is complete	Presentation material	5	8	5
PM-2: Delivers product on time	Presentation delivery time	5	8	5
Speaking-1: Organization and logic of message	Presentation material	9	3	3
Speaking-2: Clarity of message	Presentation material	11	1	3

Recommendations to improve or update student learning outcomes or assessment measures, if any: _____

Instructor's Signature

Date

Student Learning Outcomes Assessment Worksheet – Academic Foundations

**Department of Computer Science
University of West Florida**

Course name and number: CGS2060 Semester: Spring 2009

Instructor: Sharon Simmons Coordinator: _____
(for multiple-section courses)

Number of sections of the course: 1

Initial course enrollment: 33 Final course enrollment: 32

For each student learning outcome, describe how that outcome was assessed (assessment measure), and indicate number and percentage of students who exceeded, met, or failed to meet expectations. Use the number of students who completed the course to calculate the percentages.

Student Learning Outcome	Assessment of Outcome	Exceeds Expectations	Meets Expectations	Fails to Meet Expectations
PM-1: Content is complete	Presentation and power point slides	8	18	6
PM-2: Delivers product on time	Presentation	4	22	6
Speaking-1: Organization and logic of message	Presentation and power point slides	22	4	6
Speaking-2: Clarity of message	Presentation and power point slides	21	5	6

Recommendations to improve or update student learning outcomes or assessment measures, if any: _____

Instructor's Signature

Date