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Computer Information Systems

INTERNSHIP HANDBOOK

CIS280, CIS380, & CIS480

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University of Maine at Augusta
CIS280, CIS380 and CIS480 Internship in Computer Information Systems

SUMMER 2014 INTERNSHIP HANDBOOK

THE FACULTY MENTOR TEAM PROVIDES MENTORING FOR STUDENTS ENROLLED IN INTERNSHIPS IN COMPUTER INFORMATION SYSTEMS

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Each student will be assigned a faculty mentor aligned with the objectives of the selected the internship. The role of the faculty mentor will be to oversee the internship experience. Individual faculty mentor assignments will be posted to Blackboard during the first two weeks of the semester.

Course Descriptions
CIS280 Internship Experience

COURSE DESCRIPTION

The CIS280 Internship Experience is an elective information technology (IT) offering at the associate-degree level that provides the student with an opportunity to build a professional portfolio of relevant work experience. With the guidance of an organizational mentor, students will develop a significant IT project that applies appropriate information technology (IT) skills in hardware/networking, database design and development, programming, or client- and server-side Web scripting.

PREREQUISITES:

The student is expected to take the CIS280 Internship Experience after completing the core CIS associate degree requirements and at least one programming language (CIS212, CIS214, CIS215) or a Web design and development course.

COURSE OBJECTIVES:

Objectives of this course are to

- participate in an entrance meeting for all prospective interns to be scheduled approximately two weeks prior to the start of the semester
- be assigned a faculty mentor to guide the internship experience and assign internship credit
- secure an organizational mentor to direct the applied learning experience
- demonstrate a refined level of proficiency in one of the bachelor-degree level Computer Information Systems disciplines by applying appropriate information technology (IT) skills in a professional environment
- develop a significant information technology project in collaboration with the organizational sponsor/mentor
- cultivate mature life and workplace skills that prepare the student for personal and professional challenges
- maintain a reflective journal that exhibits effective communication, critical thinking, and problem solving skills during the implementation of the information technology project
- prepare a 10+ page paper describing the internship experience including goals and objectives, summary of internship, academic preparation of CIS, and overall evaluation

- present the internship experience in a professional format to all internship partners
- obtain a letter from the organizational sponsor verifying satisfactory performance and completion of required hours
- establish a network of professional contacts in the information technology field

Course Descriptions
CIS380 Internship Experience

COURSE DESCRIPTION

The CIS380 Internship Experience is a required information technology (IT) offering at bachelor-degree level that provides the student with an opportunity to build a professional portfolio of relevant work experience. With the guidance of an organizational mentor, students will develop a significant IT project that applies appropriate information technology (IT) skills in hardware/networking, database design and development, programming, or client- and server-side Web scripting.

PREREQUISITES:

The student is expected to take the CIS380 Internship Experience after completing the core CIS associate degree requirements and CIS330, CIS350, and at least one programming language (CIS212, CIS214, CIS215). As the CIS380 Internship is expected to require information systems analysis, information systems design, database design, and/or applications programming, the student should also have taken any other 300 or 400-level courses associated with the focus of the internship project.

COURSE OBJECTIVES:

Objectives of this course are to

- participate in an entrance meeting for all prospective interns to be scheduled approximately two weeks prior to the start of the semester
- be assigned a faculty mentor to guide the internship experience and assign internship credit
- secure an organizational mentor to direct the applied learning experience
- demonstrate a refined level of proficiency in one of the bachelor-degree level Computer Information Systems disciplines by applying appropriate information technology (IT) skills in a professional environment
- develop a significant information technology project in collaboration with the organizational sponsor
- cultivate mature life and workplace skills that prepare the student for personal and professional challenges
- maintain a reflective journal that exhibits effective communication, critical thinking, and problem solving skills during the implementation of the information technology project

- prepare a 10+ page paper describing the internship experience including goals and objectives, summary of internship, academic preparation of CIS, and overall evaluation
- present the internship experience in a professional format to all internship partners
- obtain a letter from the organizational sponsor verifying satisfactory performance and completion of required hours
- establish a network of professional contacts in the information technology field

Course Descriptions
CIS480 Internship Experience

COURSE DESCRIPTION

The CIS480 Internship Experience is a required information technology (IT) offering at the bachelor-degree level that provides the student with an opportunity to build a professional portfolio of relevant work experience. The CIS480 Internship Experience is typically a continuation of a 300-level internship that requires a significant amount of independent research and a higher level of responsibility. With the guidance of an organizational mentor, students will develop a significant IT project that applies appropriate information technology (IT) skills in hardware/networking, database design and development, programming, or client- and server-side Web scripting.

PREREQUISITES:

A CIS Internship Experience that is extended over two semesters may be designated as a CIS380 the first semester and a CIS480 during the second semester if the level of responsibility, application of IT skills, and independent research is significantly increased.

COURSE OBJECTIVES:

Objectives of this course are to

- participate in an entrance meeting for all prospective interns to be scheduled approximately two weeks prior to the start of the semester
- be assigned a faculty mentor to guide the internship experience and assign internship credit
- secure an organizational mentor to direct the applied learning experience
- demonstrate a refined level of proficiency in one of the bachelor-degree level Computer Information Systems disciplines by applying appropriate information technology (IT) skills in a professional environment
- develop a significant information technology project in collaboration with the organizational sponsor
- cultivate mature life and workplace skills that prepare the student for personal and professional challenges
- maintain a reflective journal that exhibits effective communication, critical thinking, and problem solving skills during the implementation of the information technology project

- prepare a 10+ page paper describing the internship experience including goals and objectives, summary of internship, academic preparation of CIS, and overall evaluation
- present the internship experience in a professional format to all internship partners
- obtain a letter from the organizational sponsor verifying satisfactory performance and completion of required hours
- establish a network of professional contacts in the information technology field

Assessing the Internship

Students will be graded on the *product and process* of developing the IT Project, an e-Portfolio, a reflective journal, a final report, and a formal presentation of the internship experience. Each of these items is covered separately in the handbook.

Although the faculty mentor will assign a grade for the Internship Experience based on the evaluation criteria, input from all partners will be considered in making a final grade determination.

GRADING AND EVALUATION CRITERIA

	Weight
Résumé and Cover Letter	10%
IT Project	40%
Reflective Journal	20%
Report	20%
Presentation	10%

Role of the Student Intern

1. Independently seek an internship position that offers the opportunity to complement and reinforce the theoretical and practical classroom and hands-on experiences provided in the CIS curriculum. This should be done at least two weeks prior to the start of the semester.

   To obtain approval of your selected internship, email the name and address of the organization, the organizational sponsor's name, and contact information to all members of the Faculty Mentor Team. Please include a brief description of the type of internship you will be performing (database development, programming, systems analysis, networking, or Web design). You will be assigned a faculty mentor based on the scope of your internship. YOU SHOULD NOT BEGIN THE INTERNSHIP UNTIL APPROVAL HAS BEEN OBTAINED.

   Once the internship has been approved, please complete the INTERNSHIP EXPERIENCE PLACEMENT FORM on page 27 of the Handbook and bring it with you to the first Internship seminar (dates for seminars will be listed in Blackboard).

2. Log in to Blackboard and review all areas of the course. The Mentoring Team will post global announcements in Blackboard throughout the semester. Additional materials, including the Internship Handbook, will be available for download.

3. Once the internship has been approved by the Faculty Mentor Team, establish contact with your organizational sponsor and articulate in writing 5-8 clear Objectives for Evaluation of learning experiences based on your selected internship opportunity. THESE MUST BE TYPED – NOT HANDWRITTEN.

   Follow the format of the INTERNSHIP OBJECTIVES FOR EVALUATION FORM on page 23 of the handbook. Email a copy of the Internship Objectives for Evaluation (which you have signed) to your assigned faculty mentor. Be sure to keep a copy of this form to scan for the e-Portfolio.

NOTE: The unsigned copy of the INTERNSHIP OBJECTIVES FOR EVALUATION will be mailed directly to the organizational sponsor near the end of the semester, with an envelope to return directly to your faculty mentor.

4. Maintain weekly contact via email – more frequently if needed (one contact per week is required). In this email, briefly describe your learning experiences and/or address concerns with your faculty mentor. This weekly contact takes the place of weekly classroom participation and is critical to the learning experience.

5. Maintain a Reflective Journal (daily or weekly) about your internship experience. Entries in the journal will provide your faculty mentor with an accurate picture of how you have matured both personally and professionally during the internship experience and will establish a pattern of continued growth and development.

   The journal is not intended to be a step-by-step listing of what you did each day, but rather an account of your experiences and how you handled corporate challenges.

6. Write a 10+ page paper describing the internship experience including a summary of the internship, how you met your internship objectives, academic preparation in the CIS program, and an appendix containing the reflective journal.

7. Obtain a letter from your organizational sponsor verifying satisfactory performance and completion of required hours. Depending on the content of this letter, it may be used as a letter of recommendation in your e-Portfolio.

8. Present a summary of the IT experience to faculty and other participating interns.

9. Participate in four scheduled internship seminars during the course of the semester.

10. Prepare a comprehensive showcase e-Portfolio that highlights your academic and professional experience to prospective employers.

Role of the Organizational Sponsor

- Provide a minimum of 150 hours of professional work experience for the participating student intern.

- Provide an organizational mentor to direct the student during the semester to be available as needed to

    - Assist the student in developing a set of 5-8 learning objectives that will be the basis of the student's evaluation

    - Have regular contact with the student to provide guidance, support, and feedback to the student intern

    - Consult with the faculty mentor by telephone or at a scheduled site visit

    - Evaluate the student at the end of the semester, using the specific learning objectives and general professional standards of performance

    - Write a letter verifying that the student has finished the required 150 hours and has satisfactorily completed the learning objectives. If appropriate, the letter could serve as a "letter of recommendation" for the student to include in the student's e-Portfolio

Role of the Faculty Mentor

1. Encourage prospective interns to utilize all available resources to obtain an internship sponsor: faculty contacts, University-sponsored projects, the Maine State Government Summer Internship Program, internship opportunity postings on the CIS Web site, professional conferences and workshops, and professional networking opportunities.

2. Plan and present four scheduled workshops: orientation, résumé building, interviewing, and IT project presentation.

3. Maintain weekly contact with the assigned student intern.

4. Contact the organizational sponsor at least once during the internship experience to discuss student progress.

5. Evaluate the student's internship experience based on the evaluation criteria and assign a grade.

Internship Checklist

- ✓ Obtain approval from the Faculty Mentor Team for the internship at least two weeks prior to the start of the semester

- ✓ A minimum of 5-8 learning objectives discussed with and approved by your organizational sponsor are due no later than the second week of the semester. These objectives are part of the evaluation criteria. PLEASE READ THE INFORMATION ABOUT WRITING OBJECTIVES in this handbook.

- ✓ Attend the scheduled internship seminars (4 total) and participate in the seminar activities (orientation, résumé preparation, job search and portfolio building).

- ✓ Work the hours required to satisfy your commitment to the organizational sponsor and the hours required to earn the number of college credits. The typical CIS Internship awards 3 credit hours, which corresponds to 10 hours per week over 15 weeks (150 hours of work).

- ✓ Maintain a reflective journal that exhibits effective communication, critical thinking, and problem-solving skills during the implementation of the information technology project.

- ✓ Consider the internship a performance-based technology project and approach the development of the IT project as you would a "real" employment position.

- ✓ Prepare a 10+ page report describing the internship experience including summary of internship, learning objectives, preparation in CIS, and an overall evaluation (sample reports available for review).

- ✓ Obtain a letter from the organizational sponsor verifying satisfactory performance and completion of required hours

- ✓ Present an overview of your internship experience to the Faculty Mentor Team and prospective interns.

- ✓ Develop a resume and cover letter with the assistance of Haley Brown *Coordinator of Career Connections*

Reflective Journal

Throughout the internship experience, the student should chronicle his/her professional challenges and opportunities in the form of a journal. Entries in the journal should NOT be a diary of daily events, but rather should record the student's thoughts as they experience new and challenging tasks.

INCORRECTLY WRITTEN JOURNAL ENTRY

"Today at 9 a.m. I made coffee for the office staff."

CORRECTLY WRITTEN JOURNAL ENTRY

"Today I was assigned the task of writing a program to update a database that required me to integrate what I learned in my programming classes and my database classes. I really had to look at what I had learned about programming and database management in a new way. I realized that I had learned to program in my programming classes and I had learned to design and maintain a database in my database classes, but they had always been separate classes. Now I am being asked to apply my programming skills to manipulate a database ". This should be an interesting challenge."

Internship Report

At the end of the internship experience, the student will write a 10+ page report, which covers the following areas:

1) A summary of the internship experience, including an overview of the IT project

2) Achievement of the "Learning Objectives for Evaluation" that were defined by the student intern and organizational mentor at the start of the internship

3) Academic preparation in CIS, which should include courses in the current curriculum that were beneficial and suggestions for additional courses in the IT area

4) The reflective journal, added as an appendix

5) Overall evaluation of the internship experience with comments and/or suggestions for improvement

The graded criteria for the report is a professionally-presented account (correct spelling and grammar) of the internship experience including Summary of the Internship, Achievement of Learning Objectives, Academic Preparation in CIS, Overall Evaluation, and an Appendix with samples of work with documentation.

Presentation

The student intern will give a formal presentation of the development of the IT Project to the Faculty Mentor Team and other participating interns. Students who plan to intern in the following semester will also be invited to view the presentations.

The presentation should last approximately 20 minutes and provide time for a Question and Answer session. The student intern may present the material in his/her choice of technologies to include PowerPoint, Web, hands-on, etc.

The student will be evaluated on the oral presentation as well as the knowledgeable responses to the audience's questions.

The student will be given an option of video-taping the presentation.

Required Internship Seminars

Seminar 1 - Overview of the Internship Experience

- Discuss the requirements of the Internship
- Complete the Internship Paperwork
    - Internship Experience Placement Form (required for insurance)
    - Volunteer Forms for University Work (if eligible)

Seminar 2 – Résumé and Cover Letter Workshop

- Résumé and over letter workshop
    - Haley Brown, Coordinator of Career Connections

Seminar 3 – Mock Job Interviews

- Apply for mock job
- Interview with mock interviewers

Seminar 4 – Internship Presentations

- Presentations for Interns and Organizational Sponsors

Writing Learning Objectives

You should describe each internship objective in one simple declarative sentence.

The key to writing a useful learning objective lies in understanding how learning is divided into categories and selecting the correct verbs for the sentences that describe each learning objective.

Your learning objectives should be placed into one of six categories, listed below from simpler to more complex. Ideally, your internship objectives will tend to be toward the more complex end of this spectrum.

Remembering – the simple recall of facts, for example making lists or keeping a journal

Sentences used to describe remembering objectives would use verbs such as define, memorize, repeat, record, list, recall, name, relate, collect, label, specify, cite, enumerate, tell, and recount

Understanding – explaining ideas or concepts, for example creating a summary report or a presentation

Sentences used to describe understanding objectives would use verbs like restate, summarize, discuss, describe, recognize, explain, express, identify, locate, report, retell, review, or translate

Applying – using newly acquired knowledge to solve problems or present information in a new way, for example constructing a model, writing a comprehensive report, or constructing a simulation

Sentences used to describe applying objectives would use verbs like choose, demonstrate, employ, illustrate, interpret, experiment, operate, schedule, sketch, solve, use, simulate, demonstrate, practice, calculate, or write.

Analyzing – breaking information or concepts into parts, determining how the parts relate to one another or to an overall structure or purpose. These tasks include differentiating, organizing and attributing as well as distinguishing between components. An example of an analyzing objective would be using a database or a spreadsheet to analyze data.

Sentences used to describe analyzing objectives would use verbs like appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, or test.

Evaluating – making critical judgments and defending positions. An example of an evaluating objective would be to compare and contrast several differing technologies for implementing a wide area network.

Sentences used to describe evaluating objectives would use verbs like appraise, argue, defend, judge, select, support, value, or evaluate.

Creating – creating new ideas or solutions, for example programming a new application or using Gantt or PERT charts.

Sentences used to describe creating objectives would use verbs like assemble, construct, create, design, develop, formulate, or write.

Internship Objectives for Evaluation

Student Name: _____

Organizational Sponsor: _____

Organizational Mentor Name (typed or printed): _____

Learning Objectives:

1. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

2. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

3. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

4. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

5. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

6. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

7. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

8. _____

_____

Please Check One

❑ Unsatisfactory ❑ Average ❑ Excellent

❑ Needs Improvement ❑ Above Average

Comments:

Internship Experience Placement Form

(CHECK SPELLING PLEASE)

Student:_____

Use your full name including any previous names (even if you changed it)

Student Phone Number: _____

Internship Level: CIS280 CIS380 CIS480 (circle one)

Internship Semester and Year: _____

NAME OF ORGANIZATIONAL SPONSOR (Organization)

_____

MAILING ADDRESS OF ORGANIZATIONAL SPONSOR:

_____

_____

_____(zip code PLEASE)

Name and Title of the person at the organization who will sign the contract.

_____

Name Title

Physical address of the organization – NOT a P.O. Box

_____

_____

_____

Name and title of Organizational Sponsor (person who will supervise your internship experience)

_____

Name Title

Organizational Mentor's Phone: _____

Organizational Mentor's Email: _____