

Overview

COMP 495 and COMP 496 are two 3-credit courses designed to allow you to demonstrate the skills you have learned in an application area of your own choosing. You may be allowed to take both COMP 495 and COMP 496 only when the proposed project for COMP 495 is too big for a single 3-credit course, in which case the big project must be clearly cut into two separate smaller projects.

All projects must include a research component, even if the focus is on developing an applied system. You may apply to work in a group as long as the individual roles and assessments are clearly defined. You may also work on a team with members from other universities in Canada or around the world on an undergraduate capstone open source project organized by UCOSP (<http://ucosp.ca>), but again, the individual roles and assessment criteria must be clearly defined in the project proposal, and the project must be supervised by an SCIS academic or a qualified IT professional approved by the course coordinator.

As you work through the course, you will complete the following tasks, in the order given:

1. Apply for registration in COMP 495/496 by contacting the course coordinator with the appropriate information, including a draft proposal. On confirmation of registration, you will have access to the online course site.
2. Read this Project Manual and share the Project Manual with the project supervisor.
3. Working with the project supervisor, develop a detailed project proposal.
4. Submit the project proposal to the course coordinator for approval. Once approved, the project proposal will serve as the learning contract between you, the supervisor and the University.
5. Complete the project under the supervision of the project supervisor.

Draft Project Proposal and

Course Registration

Along with evidence that you have completed all the credits necessary to take COMP 495/496, you will submit a draft project proposal to the course professor before final registration in the course can be approved. This will include a description of your academic record and work experience. It should also include a statement from the proposed project supervisor, if the proposed supervisor is from outside of SCIS faculty, outlining her or his qualifications and willingness to work with you.

The project can be part of your own work duties, a special project for an employer, or a project suggested by a professor, but the work must be new and yet to be completed through the course of study. For students in the BSc-CIS or BSc-CIS (Post Diploma) program, the project can be more academic-oriented research or an applied project towards the development of an applied information system. For students in the BA-IS major or other related programs, the project can be towards the analysis and design of an information system with minimal or no implementation.

In any case, the draft project proposal must include a well-worded description of the project and must also explain the rationale, the objectives, and the importance of the project. The draft proposal should be around 1200 words long, and where necessary, should include a brief literature review with references. The project must consist of new work to be done by you during the course. The draft proposal may need to be revised or even completely rewritten to ensure the suitability of the project for the course.

Course Coordinator

The coordinator of COMP 495/496 is an employee of Athabasca University whose role is to ensure that a willing and able person serves as project supervisor; that fair and reasonable agreements are established for the proposal in terms of deliverables and timelines; and that they are followed by both you and the project supervisor.

The course coordinator will provide guidelines to the project supervisor about marking individual and group work. If the project supervisor is external, the course coordinator will grade the project proposal and the project report. If necessary, the course coordinator will review the rationale for your final grade on project development and implementation, and if in agreement, approve that grade.

Project Supervisor

It is preferable that you select a suitable project supervisor from within the AU School of Computing and Information Systems, or other academic units or professional organizations. If you are unable to find an appropriate project supervisor, Athabasca University will make suggestions.

A project supervisor should at least have a master's degree in computing science or a related area, or be a certified ISP (Information Systems Professional). The project supervisor must have access to email for communication with you and the course coordinator.

The role of the project supervisor is as follows:

- to assist you in preparing a project proposal that has clear and obtainable objectives;
- to identify materials (software, equipment, etc.) that will help you fulfill the project requirements;
- to provide verbal or written information to you; to ensure that the project consists of new work;
- to evaluate the project development and implementation with respect to the objectives and evaluation scheme agreed upon in the approved project proposal / learning contract;
- and to advise you when the you are preparing the project report.

The project supervisor acts as a representative of Athabasca University, and may or may not be a full-time employee of the University. If the project supervisor is not a full-time employee of Athabasca University, he or she may be paid a small honorarium consistent with average marking costs and tutor costs per student.

Student and Supervisor Credentials

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When you submit a draft project proposal to the course coordinator, along with evidence that you have completed all the credits necessary to take COMP 495/496, the course coordinator must confirm that the proposed or recommended project supervisor has appropriate credentials and appears to understand and agree to her or his duties; that you

are capable of proposing and completing the project; and that the project appears to be suitable. If the draft project proposal is approved, you will be given permission to register in the course.

Upon registration, you will have online access to the materials necessary for further development of the project proposal through the [myAU portal](#). The course coordinator will have to make arrangements to provide course site access to any project supervisor from outside the University.

Student–Coordinator–Supervisor Agreement

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You will upload the completed project proposal to the appropriate link in the online course site. If the project proposal is acceptable to the course coordinator, the approved project proposal will serve as a learning contract between you and the project supervisor. You will then work independently with the project supervisor in completing the project. Contact with the course coordinator will be limited to unforeseen and exceptional circumstances that may affect the project's progress, and that cannot be handled by the project supervisor (e.g., advice on Athabasca University regulations), and to reporting of any agreed-upon milestones.

You, your supervisor, course coordinator, and host site contact will initially agree on a rough schedule and milestones. These will be detailed for a maximum period of 4 weeks ahead, and sub-divided into 30- to 40-hour/team workload checkpoints. The remainder of the milestones will be “best guesses.”

Ownership of Project Deliverables

The project proposal and the assessment/evaluation of the project are the property of Athabasca University. The actual output of the project is the property of the student or the co-operating institution, as they negotiate or are bound by the approved project proposal.

Schedule, Methodology, Report, Evaluation

Approximately every 2 weeks, you will produce a brief progress report, indicating where you (or your team) are on the schedule and recommending milestones for the next 4-week period. This report will be reviewed by the host site and the project supervisor. Changes to tasks and milestones will be negotiated as necessary. Project methodologies, reporting structures, and contents will be agreed upon in consultation with the individual sites. These factors will vary from site to site, reflecting the different projects and site practices.

Teams, or individuals when working alone, will retain a record of activities and progress, detailed to include meetings with the users, discussions with the project supervisor, agreements, time spent, etc. On receiving a completed project, the project supervisor will submit an evaluation and grade, based on the grading guidelines, to the course coordinator for review, discussion, and acceptance.

You will probably want to include at least the following elements in your project schedule:

1. Rough four-week scheduling and milestones with 30- to 40-hour per team check points.
 2. Bi-weekly progress reports with revised milestones.
 3. Formal project presentation.
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Student Evaluation

You will be evaluated by the project supervisor (or course coordinator when the project supervisor is external) on the basis of the project proposal (15 %) and project report (35 %). You will also be evaluated by the project supervisor on the project development and implementation (50 %) using the criteria developed by you and the project supervisor, and agreed to by the course coordinator. This evaluation will be reviewed and approved by the course coordinator. Only in exceptional circumstances would this grade not be approved.

The grades assigned by the assessor should include a technical assessment of the software and, where relevant, an assessment of user satisfaction. For group projects, assessment of each member of the group must include input from the other group members.

Part 1: Project Proposal

Once you have started in the course, you need to work with your project supervisor to develop a full proposal for the project based on the approved draft. You will need to expand or refine what you already have in the draft, making changes or adding more detail under the direction of your project supervisor.

The full proposal should be about 2000 to 4000 words long. It should include the following:

- a brief literature review with references (if necessary),
- a section describing the methods or technical strategy to be used for the project,
- a list of required materials,
- a list of project milestones (with a schedule),
- a description of the project deliverables.

The final version of the full proposal must be submitted and approved by the project supervisor before you can actually work on the project. The project proposal will serve as a learning contract between you, the supervisor, and the course coordinator on behalf of the University.

Guidelines for Marking Part 1

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The proposal will be marked out of 100 points based on the following criteria:

Project concept (5 points)

Problem definition/needs analysis/literature review/environmental scan including the following elements (25 points)

- scope
- focus
- content

Preliminary design (40 points)

Planned look and feel (10 points)

Milestones and timelines (5 points)


Suggested evaluation criteria (5 points)

Correct structure of proposal (5 points)

Readability (5 points)

These are general guidelines for proposal marking. The nature of the project may require modification to these guidelines. That will be negotiated prior to submission of the proposal.

Note that the point weights given in parentheses are approximate and may vary. For instance, if a project is totally unreadable or presented in an unacceptable format, the weight for readability would be much higher.

 Note: COMP 495 and COMP 496 are two 3-credit courses, and students have 6 months to complete each. Normally you would be allowed to take COMP 495 only. When a student is given an exception to take both COMP 495 and COMP 496, the two courses cannot be taken at the same time.

Part 2: Project Report

The project report is to be written in a standard format acceptable for the nature of the project, including use of an appropriate reference documentation style such as [APA](#), [IEEE](#), or [ACM](#). It should be about 3000 to 5000 words long; it should summarize the project goals, methods/design, design rationale, implementation, results; and provide a discussion including an assessment. For assessment purposes, you need to design an evaluation of your project that you can carry out on your own. Justify the use of your particular evaluation strategy. Your report must be submitted in .doc, .rtf, or other standard format.

Guidelines for Marking Part 2

The dimensions for assigning marks in order of weight are as follows:

1. Comprehensiveness—does it cover the elements outlined above?
2. Organization—is it a well-organized report with a strong internal logic?
3. Readability—is it easy to follow without unnecessarily complex and wordy sentences?
4. Examples—does it exhibit appropriate use of examples, illustrations, and samples (e.g., lists of classes, screen captures)?

5. Grammar and mechanics—does it follow correct verb agreement, punctuation, spelling, etc.?
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Part 3: Analysis and Design or Implementation

When the focus of the project is on the implementation of an applied information system, the deliverables for the third part of the project will be computer programs and data that implement the applied information system, as well as necessary documentation such as a user's guide. The implementation will be evaluated on the basis of the functionalities implemented, quality of coding, design and implementation of the user interface, and sufficiency of supporting documentation.

When a project has little or no programming, such as an analysis of case studies in IT/IS management, the deliverables for the third part of the project will be a well-written document in an acceptable format (.rtf, .doc, .docx, or .pdf) that provides your analysis of the cases and design of an information/computer system or solution to the problems presented by the cases. The document should be about 5000 to 7000 words long. The evaluation of the document will be based on your demonstrated grasp of the material, your analysis of the IT cases, the quality of the proposed solution or system, and the presentation of the above.

Guidelines for Marking Part 3

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The grade will be based on the following criteria:

Technical merit (40 points)

- documentation
- solution (algorithm, data structures, classes, database optimization, etc.)
- coding standards
- project-specific criteria

User satisfaction (40 points)

- interface look and feel, ease of use
- performance (speed, validity, reliability)
- project-specific criteria

Project process (20 points)

- project control and feedback to the project supervisor
- group assessment, to be negotiated where applicable.

These are general guidelines for project marking. The nature of the project may require that they be modified. That will be negotiated prior to submission of the proposal.

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Group Assessment

- Once in each contract period, every group will make a formal presentation about its project to other students and guests from the host site.
 - Project methodologies, reporting structures, and contents will be agreed upon in consultation with the individual sites. These factors will vary from site to site, reflecting the different projects and site practices.
 - Teams will retain a record of activities and progress, detailed to include meetings, agreements, time spent, etc. Individual team members will also log their time, showing the activities they have been doing. This record will provide input to the biweekly progress reports.
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