COURSE OUTLINE

2019/2020

COURSE NAME: Internship I

COURSE CODE: BAIS4991

COURSE DESCRIPTION

This course represents the 'Applied' portion of the Applied Degree. Students undertake a four-month full-time paid work experience. Students are to be responsible for one or more of Systems Development, Systems Analysis, Network Administration, Network Management, Technical Support and/or related areas. The student's employer, together with NAIT staff, will be actively monitoring the student portfolio. Internship students are to perform research on some aspect of I.T. and prepare a research report that is validated by their employer.

Course Credits: 15.00

LEARNING OUTCOMES

OUTCOME	Upon successful completion of this course, you will be able to
1	use effective verbal and written communication. The following concepts, skills, and issues are used to support this Outcome: • Use effective verbal communication on a daily basis on the job. • Use effective written communication when documenting tasks completed on the job. • Use appropriate technology to communicate. • Inform manager of project status. • Develop active listening skills. • Conduct and document research. • Write a project proposal. • Present an IT topic to other professionals. • Prepare IT documentation.
2	gather, document and analyze IT business requirements. The following concepts, skills, and issues are used to support this Outcome: • Collect and verify business requirements from clients. • Document business requirements in a way that clients can understand. • Review and analyze the business requirements to determine possible technology solutions. • Perform Strategic IT Planning techniques. • Identify and mitigate IT project risks.

3	apply IT project management principles as a team member to new and existing projects. The following concepts, skills, and issues are used to support this Outcome: • Use the employer's standards for recording IT project tasks. • Develop a Project Plan for an IT project. • Prioritize tasks. • Apply estimating techniques. • Establish task priorities. • Manage a Project Plan. • Perform a risk analysis for a project and mitigate the risks.
4	work effectively as a member of a team. The following concepts, skills, and issues are used to support this Outcome: • Conform to overall mission, vision and goals. • Communicate with other team members. • Participate in all team activities. • Resolve conflicts. • Focus on results. • Manage time effectively.
5	adhere to IT professional and ethical standards and practices. The following concepts, skills, and issues are used to support this Outcome: • Review the Canadian Information Processing Society's Ethical Principles. • Review any ethical standards and practices that your employer may have. • Maintain a positive and realistic attitude. • Show personal initiative and motivation. • Adhere to company or department value system. • Deal effectively with conflict and negotiation on the job. • Use effective time and stress management and organizational skills. • Follow an employer's standards for etiquette and dress where appropriate for a job.
6	identify solutions to technical problems through effective research, critical thinking and documentation. The following concepts, skills, and issues are used to support this Outcome: • Research technologies that could be implemented in an organization. • Select the best technology for a business need. • Use critical thinking skills. • Review internal and external documentation to identify possible solutions to problems.
7	maintain currency in the IT field through research and professional development. The following concepts, skills, and issues are used to support this Outcome: • Seek possible training from your employer. • Select a research topic that is appropriate to your development needs and your employer's needs. • Research new emerging technologies.

8	design, implement and support a network (For Network Management Major students). The following concepts, skills, and issues are used to support this Outcome: • Analyze network business and technical requirements. • Use network documentation tools and techniques. • Design and document network infrastructure. • Develop network implementation plan. • Implement a network infrastructure following implementation plan. • Monitor network performance. • Troubleshoot and support network. • Use network management tools. • Develop and follow Disaster Recovery or Business Continuity Plan. • Perform desktop user support. • Develop business case for new network equipment or network changes. • Configure and support routing in an enterprise environment. • Manage Cisco operating systems in an enterprise environment.
9	design, implement and support a server environment (For Network Management Major students). The following concepts, skills, and issues are used to support this Outcome: • Review and document server requirements. • Evaluate server alternatives according to available resources. • Prepare server implementation plan. • Perform server implementation plan. • Monitor and support server environment. • Implement and support enterprise data management. • Monitor and optimize server reliability and performance.
10	secure network, server and desktop infrastructure (For Network Management Major students). The following concepts, skills, and issues are used to support this Outcome: • Apply network security principles. • Install and configure firewall. • Evaluate infrastructure security. • Research possible system security techniques. • Adhere to security policies and practices. • Identify security holes and breaches. • Monitor network, server and desktop infrastructure security. • Implement and support intrusion detection. • Follow a company's security incident response process.

11	design, implement and support software solutions using current development tools (For Information Systems Major students) The following concepts, skills, and issues are used to support this Outcome: • Review current development tools that are appropriate for an organization. • Establish requirements or business rules and behaviors. • Evaluate and research system requirements. • Select and implement best software solution. • Follow version control procedures. • Support a software solution. • Implement and document the steps in a business process within an ERP system. • Design and implement an ERP web-based interface for business data input. • Design and generate reports for end-users using a web-based ERP interface. • perform and implement a database design. • deliver business intelligence by using current technologies for a business problem. • perform online analytical processing and data mining with business intelligence structures by using current technologies for a business problem.
12	design, implement and support Information Systems solutions for business problems using current software development methodologies (For Information Systems Major students). The following concepts, skills, and issues are used to support this Outcome: • Follow a software development methodology. • Develop or follow a process model. • Develop or follow a data model. • Develop software following specifications. • Test developed software. • Develop and implement a software implementation plan. • Troubleshoot client requests. • Write applications using a variety of internet protocols. • Develop and implement secure applications. • Design security policies that follow industry best practices. • Develop Internet-based software applications. • Develop and implement Database and Data Warehouse/Business Intelligence (BI) structures.
13	assist in complex systems integration (For Information Systems Major students). The following concepts, skills, and issues are used to support this Outcome: • Research system components. • Document data and process relationships between system components. • Document and obtain approval for system integration plan. • Develop and use database architecture for application. • Demonstrate specific software technologies as components of an overall solution. • Implement system integration plan. • Perform a system test using a Quality Assurance methodology. • Perform post implementation review.

STUDENT EVALUATION

OUTCOME	ACTIVITY DESCRIPTION	MARK DISTRIBUTION
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13	Site Visit	20%
1, 2, 3, 6 and 7	Research Proposal	5%
1, 2, 3, 5, 6 and 7	Research Report Outline	5%
1, 2, 3, 4, 5, 6 and 7	Research Report	30%
1, 3, 4, 5, 6 and 7	Student Journal	20%
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13	Employer Evaluation	20%
	TOTAL	**100%**

COURSE COMPLETION REQUIREMENTS

No less than 50%.

STUDENT EQUIPMENT AND SUPPLIES

Equipment and supplies are dependent on the resources offered by the employer. Usually everything is covered by the employer. Those on contract may have some limitations.

DELIVERY METHOD

This course will consist of the student performing on the job learning while on work experience. The student's employment will be monitored by the Internship coordinator thru the site visit, student journal. An evaluation will be completed by the employer.

ADDITIONAL INFORMATION

Internship 1 is the learning experience for a student working full time in a paid position for a minimum of 15 weeks or 600 hours. The followup internship course will be BAIS4992.

It is a requirement that students carefully review and complete all documents associated with the co-op or internship placement. Documents should be submitted on time to the BAIST Internship coordinator.

STUDENT RESPONSIBILITY

Enrolment at NAIT assumes that the student will become a responsible citizen of the Institute. As such, each student will display a positive work ethic, assist in the preservation of Institute property, and assume responsibility for his/her education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

EQUITY STATEMENT

NAIT is committed to providing an environment of equality and respect for all people within the learning community, and to educating faculty, staff, and students in developing inclusive teaching and learning contexts that are welcoming to all.

Changes to This Course Outline: Every effort has been made to ensure that information in this course outline is accurate at the time of publication. The Institute reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.