SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE:	Project Quality Management
CODE NO. :	PMG104 **SEMESTER:** 11S
PROGRAM:	Project Management Certificate
AUTHOR:	Jody Rebek and Aaron Gordon
DATE:	April 2010 **PREVIOUS OUTLINE DATED:**
APPROVED:	"Laurie Poirier" April 2011

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                    CHAIR   **DATE**

TOTAL CREDITS:	1
PREREQUISITE(S):	
HOURS/WEEK:	3

I.   COURSE DESCRIPTION:
The objective of this course is to provide an understanding of the quality movement and its' evolution into business excellence, along with illustrating the quality practices required for effective project management. Students will learn how to determine the desired outcomes or characteristics in terms of quality and then learn how to plan for the implementation, measure, monitor and adapt to ensure project success.

UNITS OF STUDY
- **Quality Management**: Understanding Quality
- **The Quality Plan**: Organizing Improvement Efforts
- **Quality Assurance**: Developing Quality Systems
- **Performing Quality Control**: Assessing Quality Outputs
- **Quality Models**: Implementing Quality Improvement

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:
1. Explain the quality movement, leaders and its' evolution into business excellence
    Potential Elements of Performance:
    - Explain the importance of quality management in business
    - Identify some of the key quality concepts and quality leaders
    - Implement quality management systems into business practices

2. Use of statistical tools to measure quality
    Potential Elements of Performance:
    - Interpret statistical results, measures of central tendency and variation
    - Apply statistical tests to measure product quality

3. Develop plans that integrate quality practices into inputs, processes and outputs
    Potential Elements of Performance:
    - Create quality practices and processes for purchasing external products or services (including quality raw materials)
    - Develop quality reporting tools to evaluate the success of quality processes (i.e., Quality Audits) and the effectiveness of product/service design, development, assembly and delivery
    - Integrate the lessons learned from the quality practices used to

improve products/services, ensuring continuous quality improvement

4.   Assess and monitor project outputs through various tools and methods
<u>Potential Elements of Performance:</u>
- Use cost-benefit analysis to initiate effective and efficient quality practices
- Implement quality tools and process checks throughout product/service life-cycle

5.   Build quality processes into management practices and integrate methods for implementing Quality practices into projects and understand how to choose the model right for the project
<u>Potential Elements of Performance:</u>
- Know how to successfully initiate quality management within the organization or team
- Understand the variety of quality standards at National and International levels and the various quality methods that can enhance product/service offerings within an organization
- Implement effective quality models that have the "right fit" within the project or organization managed

III.   TOPICS:

1.   **Quality Management**: Understanding Quality
- The drive for quality (an introduction and definition)
- Quality movement and pioneers
- Quality approaches and management concepts
- Quality leadership
2.   **Quality Assurance**: Developing Quality Systems
- Plan Quality
- Perform Quality Control and Quality Audits
- Process Analysis
3.   **The Quality Plan**: Organizing Improvement Efforts
- Cost-Benefit Analysis
- Cost of Quality
- Quality Metrics and Checklists
- Flow Charting
4.   **Performing Quality Control**: Assessing Quality of Outputs
- Quality Diagrams
- Quality Control Measurements and Statistical Sampling
- Related Change Requests
5.   **Quality Models**: Implementing Appropriate Quality Methods
- Process Capability and Acceptance Sampling

- Six Sigma, Lean Six Sigma and DMAIC
- Just In Time, Total Quality Management and Quality Circles

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

1. A Guide to the Project Management Body of Knowledge (PMBOK Guide). 4th ed. 2008. Project Management Institute Inc. (USA)

2. Kerzner, Harold. "**Project Management: A Systems Approach to Planning, Scheduling, and Controlling**", 10th ed. Hoboken, NJ: Wiley, 2009.

V. EVALUATION PROCESS/GRADING SYSTEM:

Participation	**20%**
Assignments (4 @ 10%)	**40%**
Final Exam (Multiple Choice)	**40%**

Participation
Attendance is an important component, as it enables students to contribute effectively to classroom learning. For instance, asking questions, sharing ideas and engaging in learning exercises and the opportunities provided.

Assignments
A total of four assignments will be distributed in this course. These must be typewritten and submitted via email. No late submissions will be accepted.

Final Exam
The final exam will be a series of multiple-choice questions.

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	

S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

VI.   SPECIAL NOTES:

Course Outline Amendments:
The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Retention of Course Outlines:
It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Prior Learning Assessment:
Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

Substitute course information is available in the Registrar's office.

Disability Services:
If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Project Quality Management   PMG104

Communication:
The College considers *WebCT/LMS* as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the *Learning Management System* communication tool.

Plagiarism:
Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade "C", (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Student Portal:
The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. Announcements, news, the academic calendar of events, class cancellations, your learning management system (LMS), and much more are also accessible through the student portal. Go to https://my.saultcollege.ca.

Electronic Devices in the Classroom:
Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

Attendance:
Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

Tuition Default:
Students who have defaulted on the payment of tuition (tuition has not been paid in full, payments were not deferred or payment plan not honoured) as of the first week of June will be removed from placement and clinical activities. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.

Apply the concepts learned in this course to enhance your ability to manage project quality, ensuring quality results!