Table 7:18: CS 610 Problem Driven Group Project

<table>
<tr><td>Course Code</td><td colspan="3">CS 610</td><td>Total Credits:</td><td>12</td></tr>
<tr><td>Course Name</td><td colspan="5">Problem Driven Group Project</td></tr>
<tr><td rowspan="2">Delivery Mode:</td><td>Lecture Hrs/Sem</td><td>Tutorial Hrs/Sem</td><td>Practical Hrs/Sem</td><td>Assignments Hrs/Wk</td><td>Independent Studies Hrs/Sem</td><td>Total Hrs/Sem</td></tr>
<tr><td></td><td>10</td><td>30</td><td></td><td>80</td><td>120</td></tr>
<tr><td>Assessment Mode:</td><td colspan="5">Progress Reports and Presentations (40%)
Final Report, Presentation and Project Result Demonstration (60%)</td></tr>
<tr><td>Prerequisites:</td><td colspan="5">None</td></tr>
<tr><td>Objective:</td><td colspan="5">The objectives of the course are:
i. To develop the capacity to work in multidisciplinary settings to solve real life problems.
ii. To develop and enhance academia and industrial linkages.
iii. To foster innovation and create business opportunities from academic activities
iv. Motivate learning in the students.
v. Develop critical reasoning abilities in the students.
vi. Enable the students adopt critical thinking and structure knowledge in the context of problems in their field of study.
vii. Develop self-learning skills in the students.
viii. To enhance entrepreneurship skills.</td></tr>
<tr><td>Learning Outcomes:</td><td colspan="5">Upon completion, students should be able to:
i. Take responsibility, or ownership, for their learning,
ii. Adopt better work habits and attitudes toward learning
iii. Develop more independence in solving problems
iv. Study questions and combine them using critical thinking skills to come up with answers.
v. Employ effective self-directed and self-motivated learning skills and proactive thinking
vi. Find and use appropriate resources for problem solving
vii. Utilize collaborative and team-work skills in problem solving</td></tr>
<tr><td colspan="6">Course Contents:</td></tr>
<tr><td colspan="6">The course instructor and learners shall work with industry and the society to identify challenges in work places, service provision and industries and agree on how to approach and address the challenge. The challenges must be from societal and industrial challenges that aim at among other factors to improve productivity and/or comfort, efficiency, developing new ways/approached/products that are directly applicable and useful or affecting how people do things.
The identified challenges shall be assigned to a group of students from three to a maximum of five for each challenge where each student shall be assigned specific task to address in the challenge such that they jointly through individual tasks shall address the challenge. All members of the group shall support team members to ensure success of their assignment without jeopardizing the responsibility of each of the team members academic role. Each shall be assessed the role as a team player and also own contribution through accomplishment of a given task within the challenge.
The members shall be encouraged to work as a team while also knowing on their own task. They shall also be required to work closely with the community where the challenge was identified and interest to have it addressed indicated by them.</td></tr>
</table>

	The students will be allocated into groups with own role in the group and the instructor will guide the students in their project work. The students will be required to make a presentation of their work and their project result, as well as write a report. The assessment will be obtained from the process of solving the challenge, presentations, and report. Minimum requirement shall be providing working solution for the challenge. Hence, individual student contributions and understanding will be assessed as well as group solution. Therefore, the final marks are not uniformly distributed to each group members.
Reading List:	
1.	Knowlton, D. S. & Sharp, D. C. (2003). Problem-Based Learning in the Information Age. Jossey-Bass, ISBN-978-0787971724.
2.	Savin-Baden, M. (2000). Problem-Based Learning in Higher Education: Untold Stories. Open University Press, ISBN- 978-0335203376.
3.	Savin-Baden, M. (2008). A Practical Guide to Problem-based Learning Online. Routlege, ISBN-0415437873.
4.	Torp, L. & Sage, S. R. (2002). Problems as Possibilities: Problem-Based Learning for K-16 Education (2^{nd} ed.). Association for Supervision and Curriculum Development, ISBN- 978-0871205742
5.	Uden, L.,& Beaumont, C. (2005). Technology and Problem-Based Learning. Information Science Publishing, ISBN-1591407443.