



CHEMISTRY PROJECT WORK

OSUN Connected Learning Contest Winner

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Course: Chemistry 101

Ultimately every project must link to topics discussed in class or a close indirect application of chemistry. Some of the topics may relate to the properties of pure substance, the periodic table and various chemical reactions. Projects are submitted as shared research paper, videos, google document, powerpoint or combinations of available tools

The project idea is discussed during the first week of class so that students have enough time to think about it and adequately plan for or execute the project. After a month into the semester, details of the project and rubrics for grading the project is provided. Students are provided a list of past projects they could choose from or the option to come up with their own projects. Students are required to make a decision on project choice and whether they prefer to work in small groups or as individuals. Once projects are approved, a deadline for the project submission is set towards the end of the semester. Students who submit their projects before the due date can have their work reviewed by the instructor to ensure they get a better grade by the time of final submission.

Chemistry 101

This course is a one-semester chemistry course that will build on the fundamentals of General Chemistry. A review of foundational topics such as atomic structure, molecular structure, properties of molecules and chemical bond formation will precede the course. The concepts introduced in this course will include behavior of gases, energy changes, theory of light, solutions, acid-base and nuclear reactions. Throughout the course, a heavy emphasis is placed on group activities and individual problem-solving skills as well as laboratory-based investigations of important phenomena.

Practical and pedagogical value

Students had the opportunity to use whatever resources available to enrich their project work and understand the course content better. This project also ensured that instructor was constantly in touch with students, students were collaborating with each other through social media or email to get academic work done. My experience with this project is that it suddenly whipped up enthusiasm to get work done in a timely and fun fashion. One of the students asked if they could bake cookies with family at home and use that as project work. My answer was 'yes if you can connect the process to chemistry, that is a good project'. There were varieties of creativity that came up at the end. Though about half of the class did not start this project early, the few who worked on it consistently throughout the semester had a lot to show.

The assignment

This year you have the opportunity to come up with your own project or select from the list of past projects in the shared google drive folder. You will work in groups or individually to design a project that applies the concepts we have learned in the General Chemistry class. You will be given a date to present your work towards the end of the semester. The grade for this project will be 100% of your third Exam.

Steps to guide you.

1. Come up with a project you would like to embark on
2. Discuss with instructor for approval
3. Carry out the project
4. Submit a video, powerpoint presentation or use any other medium to show your work
5. Present a page summary of your findings with references.

Rubric for grading your project work:

1. Relevance of project work to course content	-30
2. Nice and creative design of display	-10
3. Fluency in presentation	-10
4. Professionalism during presentation	-10
5. Formal appearance	-10
6. Response to questions	-10
7. Presentation and submission of paper on time	-10
8. Paper	-10
Total	100