

GPRM 521
Project Management

Individual Assignment
Project Baseline Plan

Re-engineering of OSCE's for 1st Year Nursing Students

Verena Neethling
28398483

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I, Verena Neethling, hereby declare that this is my own work.

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1 Introduction

Project management can be defined as the application of processes, skills, methods, knowledge and experience to achieve specific objectives. Project management has final deliverables within a detailed timeframe and budget. Time, cost and quality are vital in the execution of successful projects. A professional that works within a project needs to encompass a wide range of skills ranging from technical skills to people management skills (What is project management, 2020).

The North-West University (NWU) is a public university located in the North-West province of South-Africa. The university has three campuses, one in Potchefstroom, one in Mafikeng and one in Vanderbijlpark. Two of these campuses currently offer the degree in Nursing Science, previously known as the BCur degree in Nursing. The South African Nursing Council (SANC) is the regulating body of the profession in South Africa. After years of planning, SANC announced that the new nursing qualification, the BNur degree will be commenced in 2020. Simultaneously, the North-West University decided to implement the aligned programme across campuses.

An objective structured clinical examination (OSCE) is a type of examination or assessment used in health sciences. It is designed to test competency in clinical skills in a real-world approach to learning and assessment. The School of Nursing Science (SONS) at the NWU makes use of OSCE's to evaluate the competency of nursing students in specific year groups, as regulated by the SANC. The content and scoring of OSCE stations are standardized, and each student is assessed on a specific skill within the same timeframe.

The SONS at the NWU has been implementing OSCE's in the same manner for many years. Best practices have however revealed that there is a need to re-engineer OSCE's in the field of nursing. Since the implementation of the aligned new programme is now offered on two of our campuses, this seems like the opportunity to re-engineer the manner in which OSCE's are executed. The aim of the re-engineering or change is to reduce workload for clinical examiners and to improve better coordination, and ensure a higher quality OSCE that is valid and reliable. Many problems have been identified over the years which includes evaluators fatigue, unwillingness of evaluators to assist in OSCE's due to time restraints, and a decrease in reliability and validity due to a reduced number of stations or data points. The SONS has therefore decided to projectise the re-engineering of OSCE's for the 1st year nursing students in the 2020 academic year. The project baseline plan for the re-engineering will be discussed in the sections below.

2 Description of project and its context

Nicholas and Steyn (2017:37) defines a project as a series of tasks that needs to be completed in order to reach a specific outcome. Projects can either be classified as simple, where the project is only managed by one or a few individuals, or as a complex project where numerous individuals are involved. According to the authors, a project has a defined goal and purpose with well-defined deliverables, results or products to achieve detailed benefits. All projects are unique, and it requires to do something different than was done previously. It is a one-time activity that is not to be repeated again. In addition, a project seeks to accomplish the goals and objectives within a scheduled time frame. Projects may furthermore make use of people and resources from different organizations or departments within organizations. Due to the fact that each project is unique, risks and unfamiliarity will always be present (Nicholas & Steyn, 2017:37-38).

OSCE's are a series of tasks that needs to be implemented in order to ensure that nursing students are skilled in competent in clinical procedures. The re-engineering of OSCE's are seen as a complex project as it is managed by numerous individuals and role-players within the SONS and individuals within the clinical facilities. The goal is to re-engineer OSCE's to make it more practicable and to reduce the workload for clinical examiners to avoid evaluators fatigue. The re-engineering is similarly aimed to improve better coordination between students and examiners, and to ultimately ensure an examination that is fair, valid and reliable. This will require a dynamic change in the manner in which these examinations have been performed over recent years.

3 Scope / Project definition

Scope management refers to the set of processes that ensure that a project's scope is accurately defined. This will allow project managers to allocate the right amount of work necessary to successfully complete a project. Planning, controlling and closing are the three processes within project scope management. The planning process aims to define the exact work that needs to be done. Controlling and monitoring focuses on tracking, scope creep and approving or disapproving any project changes. Finally, the closing of a project includes an audit of the project deliverables and a comprehensive assessment of the outcomes achieved against the original baseline plan (Monnappa, 2020).

Therefore, the scope of a project is a clear identification of the work that needs to be done and to ensure that the deliverables be completed with the agreed timeframe and budget. There are various steps involved in project scope management. Firstly, the project needs should to be defined. This includes establishing a project timeline, the allocation of resources

and to set the project goals. Once the abovementioned has been established, team members can be allocated certain tasks and be provided with direction in the given timeframe and budget. The OSCE's will be performed in November 2020 over the course of one calendar day. Various resources would be needed which includes human resources, supplies and equipment. Skilled professional nurses from outside the organization will be asked to assist with clinical evaluations, as well as the personnel and academic staff members within the organization. In addition, a venue like the simulation laboratory is required to set up clinical stations and data points where students will be assessed. Clinical supplies, manikins, equipment, linen and bed trolleys is a few of the resources that would be a prerequisite for the OSCE to be implemented successfully. The tasks of each stakeholder should be well defined and the time limit for each data point should be clearly communicated. The next step would be to establish and comprehend the project objectives. The objective of the chosen project would be to re-engineer the implementation in the manner of which OSCE's will be done within the SONS. The project manager would be responsible to ensure that the team delivers results according to the specific function of each team member. The final step would be to define the project scope which includes the resources and work that would be needed for the tasks in order for the goals to be met (Monnappa, 2020).

4 Project life-cycle

The project life-cycle provides a 4-step framework for managing any type of project within an organization. This cycle is designed to assist project managers to guide their projects successfully from start to finish. The purpose of the project life-cycle is to create an easy framework to direct projects (Nediger, 2019). In addition, this cycle will assist to ease communication between teams and stakeholders, help to mitigate risks and assist to ensure that goals are achievable with the available resources. The 4 phases of the project life-cycles include the project initiation phase, the project planning phase, the project execution phase and lastly the project closure phase.

The project initiation phase aims at understanding the goals, priorities, deadlines and possible risks of the project. In this phase the project manager will usually meet with clients and stakeholders to comprehend their perceived goals and motivations for the project. Intensive research on the project topic and discussions in this stage is fundamental for the success of the project. Nediger (2019) describes the following steps for the initiation stage, which includes identifying the project objectives and deliverables, outlining the project risks, dependancies, constraints and priorities, establishing the project scope based on the

deadlines and available resources, and lastly the submission of a project proposal for approval by the client.

The next phase is the project planning stage which involves the outline of tasks and the description of the timeline required to execute the specific project. Once the proposal has been approved a project plan can be compiled. The project plan aims to translate the project proposal into a series of actionable tasks and scheduling those tasks in a project roadmap. A detailed description of the processes and workflow that the team will utilize should be included in the roadmap. Furthermore, measurable short-term goals and potential issues that can disrupt these goals should be included. The project plan will therefore be a source of facts when any queries or conflicts arise throughout the project (Nediger, 2019).

In the project execution phase the project plan is put into action and the project performance is monitored continuously. This phase is characterized with the start of the true project when all the tasks and activities as indicated in the project plan is carried out. The primary responsibilities of the project manager in the execution phase is to monitor and control the execution process by reviewing the quality of the project teams' output. Adjustment and updates of tasks, goals and deadlines frequently occurs in this stage to meet with changing conditions. Lastly, it is vital that the project manager communicate progress between the team and the project stakeholders in this stage (Nediger, 2019).

The final stage in the project life-cycle is the project closure stage. Once the goals of the project have been achieved and the results have been signed off by the stakeholders, the project manager may continue to implement the project closure stage. The results of the project are analysed and a summary of the key learnings is made. The project manager will therefore hand off the deliverables, release the team members and project resources, and analyse the project performance retrospectively (Nediger, 2019). Figure 1 below illustrates the project life-cycles' diagram.

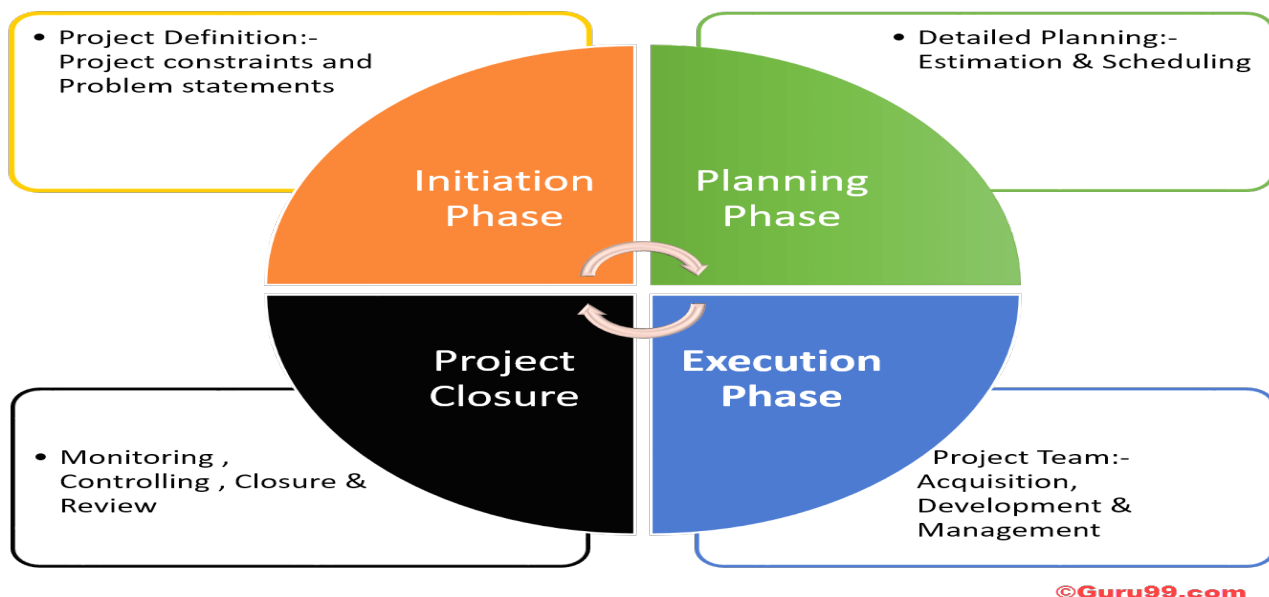


Figure 1: Project Life-Cycle Diagram (Phases of Project Management Life Cycle)

5 Stakeholders and team

As projects are collaborative efforts, it is important to recognize the stakeholders and the team of a project. A project stakeholder can be defined as the individuals and organizations who are actively involved in the project. They are the key members, both internally and externally, that will determine the success or failure of the project (What is a project stakeholder). The stakeholders in the re-engineering of the OSCE's of first year nursing students will be the North-West University (employees, students and resources), as well as the professional nurses from various clinical facilities in and around the Potchefstroom area. The project stakeholders are therefore the people and groups that have something to gain or lose from the project's outcome. It is the task of the project manager to keep all stakeholders informed and involved throughout the projects progression and maintaining stakeholder relationships. For the purpose of the re-engineering of OSCE's project, it is the duty of the project manager to continuously inform the students and the evaluators of the dates, time schedules and practical flow of the clinical examinations.

6 Work Breakdown Structure (WBS)

The work breakdown structure (WBS) can be defined as a deliverable orientated hierarchical decomposition of the work to be executed by the project team (Work Breakdown Structure, 2020). Breaking up the work into smaller tasks is a technique used to make the tasks in a project more manageable and approachable. The WBS singlehandedly integrates the scope, cost and schedule baselines in order to ensure that the project plans are in alignment.

The WBS for the re-engineering of OSCE's for 1st year nursing students is summarized in figure 2 below.

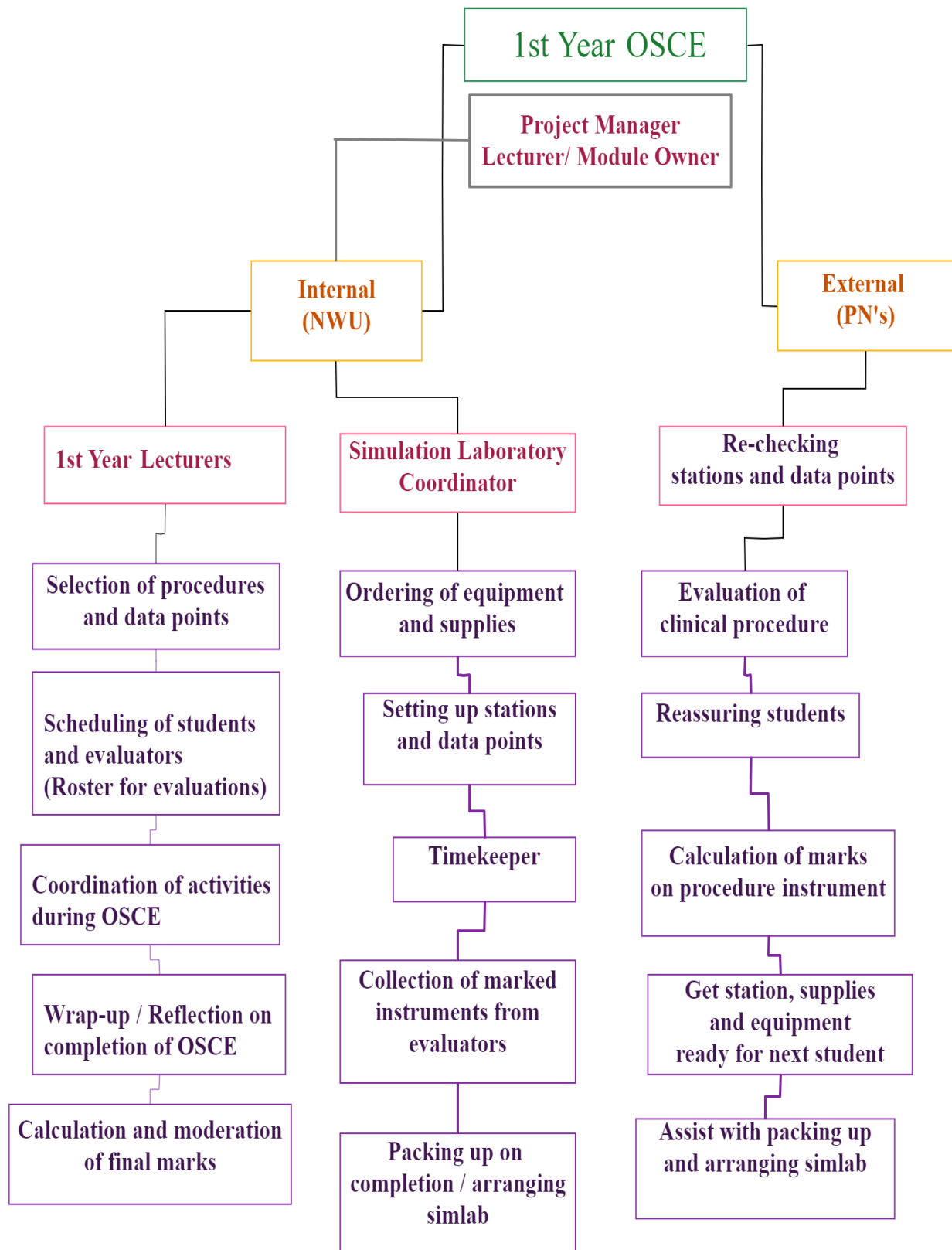


Figure 2: WBS for 1st Year OSCE

7 Responsible Assignment Matrix (RAM)

The responsible assignment matrix (RAM) describes the participation by various people, organizations and roles in completing the deliverables for a project. Delos Santos (2018) states that the RAM is a tool to explicitly communicate on a project so that all stakeholders knows what is happening, and who is responsible for which tasks. The RAM is also commonly referred to as the RACI, which is the acronym for responsible, accountable, consulted and informed. The term responsible refers to a description of which individual is completing the task at hand. Accountability refers to the person(s) who is making decisions and taking actions on the task at hand. The consultation describes who will be communicated with regarding decisions and tasks. Being informed refers to who will be updated on decisions and actions during a project (Delos Santos, 2018). Table 1 illustrates the RAM for the re-engineering of OSCE's for 1st year nursing students.

Project task or deliverable	Project Manager	Simlab Coordinator	1 st Year Lecturers	Professional Nurses
Project initiation	R / A	I	R / A	I
Project planning	R	R / C / I	C	I
Project execution	A	A	R	R
Project closure	R / A	I	R	I

Table 1: Responsible Assignment Matrix (RAM/RACI)

Key: (**R**)esponsible, (**A**)ccountable, (**C**)onsulted, (**I**)nformed

8 Schedule of work

The schedule of work indicates what needs to be done and which resources are required to complete the project in time. It is fundamentally a timetable that outlines the start and end date of a project, and the timelines that must be met for the project to be completed in time (Project Management Guide, 2020). The project work schedule is every so often used in combination with the WBS as a means to equally distribute the work amongst team members. In addition, the Gantt chart is a project management tool that assists in the planning and scheduling of projects. The Gantt chart gives you a visual display of the entire project, the timelines and deadlines of all tasks, the relationship and dependencies between the various activities and the project phases (Association for project management, 2020). The OSCE for the 1st year nursing students have to be completed in one calendar day in order to ensure integrity, validity and reliability. Figure 3 below illustrates the Gantt chart for the re-engineering of OSCE's for 1st year nursing students.

Re-engineering of OSCE's for 1st Year Nursing Students

	TASK NAME	START DATE	END DATE	DURATION (WORK DAYS)	TEAM MEMBER		WEEK 1					WEEK 2					WEEK 3				
							M	T	W	Th	F	M	T	W	Th	F	M	T	W	Th	F
	OSCE					Nov-20	2	3	4	5	6	9	10	11	12	13	16	17	18	19	20
	Planning of OSCE	09-Nov	13-Nov	5	1st Year Team	A															
	Ordering equipment and supplies	09-Nov	13-Nov	5	Simlab Coordinator	B															
	Scheduling of students	11-Nov	11-Nov	1	1st Year Lecturers	C															
	Setting up stations / data points	13-Nov	13-Nov	1	Simlab Coordinator	D															
	Coordination of activities during OSCE	16-Nov	16-Nov	1	1st Year Lecturers	E															
	Evaluation of clinical procedures	16-Nov	16-Nov	1	PNs	F															
	Calculation of marks on instrument	16-Nov	16-Nov	1	PNs	G															
	Wrap-up / reflection on completion	16-Nov	16-Nov	1	1st Year Lecturers	H															
	Packing up and arranging simlab	16-Nov	16-Nov	1	OSCE Team	I															
	Calculation and moderation of final marks	17-Nov	18-Nov	2	Lecturer module owner	J															

9 Cost estimation

Cost estimation is one of the most important processes in project management. It is the defined as the process of forecasting a project's cost with a defined scope. Cost estimation is done before the projects commences but may also be used during the project in the event of major changes (Usmani, 2020). The cost estimation for the re-engineering is summarized in Table 2 below.

Cost estimation				
Key activities	Measuring units	Cost per day	Units	Total cost
Professional Nurses	Person	R 1 280,00	18	R 23 040,00
Equipment and supplies	Equipment	R2 800	1	R 2 800,00
Refreshments	Food	R560	1	R560
Printing	Paper	R 280,00	1	R 280,00
	Total budget:			R 26 680,00

Table 2: Cost Estimation of Re-engineering of OSCE's

10 Conclusion

The re-engineering of 1st year OSCE's for nursing students is necessary for the quality of nursing education. Evidenced based and best practices has demonstrated that the use of additional data points and stations will improve the quality of procedures being assessed. The project at hand will therefore strive to change the current way in which OSCE's are being executed. The project baseline plan gives an overview of what a project is with a description of the context of the particular project. Next, the scope, project life-cycle, and the stakeholders and team of the project is discussed. In conclusion, the WBS, RAM, schedule of work and the cost estimation of the re-engineering of OSCE's for 1st year nursing students is described and illustrated by means of figures and tables.

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