

DAPM06S/101/3/2011

### **College of Economic and Management Sciences**

**Centre for Public Administration and Management** 

## PROGRAMME IN BASIC-, INTERMEDIATE- AND ADVANCED PROJECT MANAGEMENT

## INFORMATION TECHNOLOGY FOR PROJECT MANAGEMENT (DAPM06S)

TUTORIAL LETTER 101/3/2011

### IMPORTANT INFORMATION: READ NOW.

Assignment 1, 2 and 3 (Portfolio of Evidence) are contained in this Tutorial Letter. This is the only tutorial letter for this module.

#### CONTENTS

#### PAGE

1.	INTRODUCTION	3
2.	SYLLABUS	3
2.1	Programme in Basic-, Intermediate- and Advanced Project Management	3
2.2	Information Technology for Project Management	3
3.	PRESCRIBED AND RECOMMENDED READING	4
3. 4	LIBRARY AND INFORMATION SERVICES	4
4.1	Library hours	4
4. i 5.	INFORMATION ABOUT THE PROGRAMME IN BASIC-, INTERMEDIATE-	4
5.	AND ADVANCED PROJECT MANAGEMENT	5
5.1	Exemption	5
5.1	•	
	Important information pertaining to this programme ASSESSMENT PLAN	5
6.		5
6.1	Purpose of assessment	6
6.2	Assessment method	6
6.3	Reasons for the assessment	6
6.4	Persons involved in the assessment process	6 7
6.5	Assessment time frame	
6.6	Assessment review and quality assurance	7
6.7	Assessment logistics	8
6.8	Learning outcomes and assessment criteria	8
7.		8
7.1	Contact with the lecturer and UNISA	8
7.2	Contact with administrative staff members	9
8.	ASSIGNMENTS AND PORTFOLIO OF EVIDENCE	9
8.1	Due dates for the submission of assignments and the portfolio of evidence	10
8.2	Continuous evaluation	10
8.3	Submission of the assignments and the portfolio of evidence	11
8.4	Assignment cover	11
8.5	Presentation of assignments and the portfolio of evidence	12
8.6	Posting of assignments and the portfolio of evidence	12
8.7	Copying of assignments and portfolio of evidence	12
8.8	Additional guidelines	12
8.9	Submission of assignments on myUnisa	13
8.10	Examination	13
9.	COMPULSORY ASSIGNMENTS AND PORTFOLIO OF EVIDENCE FOR 2011	13
9.1	Assignment 01: Multiple choice questions (compulsory)	13
9.2	Assignment 02: Multiple choice questions (compulsory)	15
9.3	Assignment 03: Portfolio of evidence (compulsory)	16
10.	CONCLUSION	18

#### **COPYRIGHT DECLARATION**

In terms of the Copyright Act 98 of 1978, no part of this material may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, published, redistributed, screened or used in any form without prior written permission from UNISA. Where materials have been used from other sources, permission must be obtained from the original source.

#### 1. INTRODUCTION

Welcome to the Programme in Basic-, Intermediate- and Advanced Project Management at UNISA. I trust that you will not only enjoy the programme, but also that you will find it useful with regard to your work.

#### 2. SYLLABUS

The syllabi for this programme and the module are specified hereunder.

#### 2.1 **Programme in Basic-, Intermediate- and Advanced Project Management:**

The Programme consists of the following twelve (12) modules:

#### Semester 1 registration period 1: (Part 1)

- The Project Management Framework (Module code: DAPM01M)
- Strategic Project Management (Module code: DAPM02N)
- Project Management for Development and Upliftment (Module code: DAPM03P)
- Project Management Processes (Module code: DAPM04Q)
- Project Time Management (Module code: DAPM05R)
- Project Human Resources Management (Module code: DAPM07T)

#### Semester 2 registration period 2: (Part 2)

- Project Cost Management (Module code: DAPM08U)
- Project Procurement Management (Module code: DAPM09V)
- Project Risk Management (Module code: DAPM10N)
- Project Quality Management (Module code: DAPM11P)
- Project Communications Management (Module code: DAPM12Q)
- Information Technology for Project Management (Module code: DAPM06S)

#### 2.2 Information Technology for Project Management

This module consists of 2 study units:

- Introduction to MS Project 2007
- Building your plan, track and manage your project

#### 3. PRESCRIBED AND RECOMMENDED READING

There is no prescribed book for this module:

## The following book that you have received with your module, forms part of your study material:

Chatfield, Carl. & Johnson, Timothy. 2007. Microsoft Office Project 2007 Step by Step. Washington: Microsoft Press.

The following books are *recommended* to help you with your studies and to complete the assignment:

Knipe, A., Van der Waldt, G., Van Niekerk, D., Burger, D., and Nell, K., 2002. <u>Project</u> <u>Management for Success</u>.: Cape Town: Heinemann.

Van der Waldt, G., & Knipe, A., 1998. <u>Project Management for Strategic Change and Upliftment.</u> Cape Town: Oxford University Press.

These books can be borrowed from the UNISA library or public libraries.

#### You are encouraged to consult as many project management sources as possible.

#### 4. LIBRARY AND INFORMATION SERVICES

#### 4.1 Library hours

Please note the UNISA Library hours at the **Florida** campus:

- Mondays to Fridays 09:00 16:00 (Between 07:45 & 09:00 a voice-mail service is available)
- Saturdays 09:00 12:00 (Times are subject to change)
- The Library is closed on Sundays and public holidays

Please note the UNISA Library hours at the **Muckleneuk** campus:

- From January to November, Mondays to Fridays 07:45 18:00, Saturdays from 08:00 – 16:00
- December, Mondays to Fridays 07:45 16:00, Saturdays from 08:00 13:00

Please note that the *Services and Procedures*, which lists all the services offered by the Unisa library is available at <u>http://www.unisa.ac.za/contents/library/docs/2008.pdf</u>

Most of the Library's services are available electronically. Please call the Library on (012) 429 3641 for more information.

### 5. INFORMATION ABOUT THE PROGRAMME IN BASIC-, INTERMEDIATE- AND ADVANCED PROJECT MANAGEMENT

#### The following information is very important:

You must register for the first six (6) modules during the first registration period (part 1) and the remaining six modules during the second registration period (part 2). Also refer to point 2 above for the module particulars.

#### 5.1 Exemption

Upon successful completion of this programme, students who register for the National Diploma in Public Management will qualify for exemption towards the module Project Management II (PMN201P)

#### 5.2 Important information pertaining to this programme

- Students need to register for the first six modules of the 1<sup>st</sup> registration period (part 1) and must pass four or more modules before they can register for the 2<sup>nd</sup> registration period (part 2).
- Twelve (12) months open distance learning in which a student must complete two (2) compulsory assignments and one (1) compulsory portfolio of evidence (Assignment 3) for each module for assessment
- Candidates who successfully complete this programme will be awarded with a UNISA competency certificate
- All modules are outcomes-based to ensure maximisation of skills and application
- This programme is offered on NQF level 5 and carries 96 credits

#### 6. ASSESSMENT PLAN

All assessment activities during the semester will be based on this assessment plan.

#### 6.1 Purpose of assessment

The purpose of the assessment interventions (assignments and portfolio of evidence) is to determine students' scientific and practical competence. Students' ability to identify and analyse the role and functions of project management in the public sector is assessed.

#### 6.2 Assessment method

The assessment plan is based on two compulsory formative assessment interventions, namely two multiple-choice assignments and one compulsory summative assessment intervention, namely the one portfolio of evidence assignment. The multiple-choice assignments give evidence of students' competence in the form of their answers to 10 multiple-choice questions. The portfolio of evidence assignment requires the learner's individual input.

#### 6.3 Reasons for the assessment

The following are the reasons why these assessment interventions are conducted:

- To determine whether the learning required for the achievement of specific learning outcomes in the field of project procurement management has taken place.
- To collect evidence of students' newly acquired knowledge of project procurement management in the public sector.

#### 6.4 Persons involved in the assessment process

Three different assessors are involved in the assessment process, namely the student, the lecturer and the external assessor.

6

#### Student:

In the case of the formative interventions the student has the primary responsibility for the success of the assignments. In other words, the student is encouraged to become an independent learner and has to check (self-assess) the contents of the assignment before it is submitted for assessment.

#### Lecturer:

The formative and summative interventions will be assessed by appropriately qualified and trained lecturing staff or marking staff. All the staff members involved in the assessment process have completed the required assessor training successfully. The marking staff, mark the portfolio according to the learning outcomes and assessment criteria set out in the study material.

#### External assessor:

The summative intervention will also be assessed by an appropriately qualified academic person.

#### 6.5 Assessment time frame

All work submitted for summative assessment (the portfolio assignment) will be returned within a reasonable time (a maximum turnover time of three weeks after the marking).

#### 6.6 Assessment review and quality assurance

To ensure the quality of the formative and summative interventions, they are benchmarked against the best current quality assurance practices (see the *Academic Quality Framework of the College of Economic and Management Sciences* on the *UNISA website*).

7

#### 6.7 Assessment logistics

The learner is referred to the *UNISA Services and Procedures* for any other information about assessment related administration, such as agreements concerning learners with special needs (for example, disabled learners).

#### 6.8 Learning outcomes and assessment criteria

#### Learning outcome 1

Students should have an informed understanding and an ability to effectively apply essential techniques of MS Project 2007 for building, tracking and managing a project

#### Assessment Criteria

In the form of tasks, various activities and self-evaluation questions in the study material, multiple-choice assignments and a portfolio of evidence, students will be assessed on their ability to:

- Select appropriate project management software
- Have a clear understanding of MS Project 2007
- Navigate the features of MS Project 2007
- Plan and track any project by utilising MS Project 2007
- Compile reports of projects through the use of MS Project 2007

#### 7. GENERAL INFORMATION

#### 7.1 Contact with the lecturer and UNISA

Contact any of the following persons for academic support regarding any of the twelve modules:

#### Primary lecturer for this module:

• Ms Anne Barnes, Tel.: (012) 429-6939 abarnes@unisa.ac.za

#### **Co-lecturers:**

- Mr Barry Nkgabe, Tel.: (012) 429-6467 <u>bnkgabe@unisa.ac.za</u>
- Mr Lekgolo Phosa, Tel.: (012) 429-6422 Lphosa@unisa.ac.za
- Prof Kobus Wessels, Tel.: (012) 429-6099 Wessejs@unisa.ac.za
- Prof Dirk Brynard, Tel. (012) 429 6393 <u>brynadj@unisa.ac.za</u>
- Mr Alfred Matthews, Tel.: (011) 471-2357 amatthew@unisa.ac.za

#### 7.2 Contact with administrative staff members

Contact any of the following persons for administrative support regarding any of the twelve modules:

- Ms Leonie Champion, Tel.: (011) 471-2975 Lchampion@unisa.ac.za
- Mr Mfihlo Tabane, Tel. (011) 471-3051 Tabanbm@unisa.ac.za

The fax number of the Centre for Public Administration and Management is (011) 471 3568.

You can also contact the Unisa Contact Centre for administrative enquiries on issues such as confirmation that assignments have been received, results, academic records and student accounts. The Contact Centre's telephone number is (011) 670 9000 or 0861 670411.

#### 8. ASSIGNMENTS AND PORTFOLIO OF EVIDENCE

You must submit two (2) compulsory assignments for each module which will count 10% of the final mark. One compulsory portfolio of evidence (Assignment 3) for each module must be submitted for assessment purposes which will count 90% of the final mark. **NO EXTENSION FOR ASSIGNMENTS OR PORFOLIOS WILL BE GRANTED TO STUDENTS.** If submitted late, it will be returned to you as an unmarked assignment or portfolio and therefore you will have to re-register for that specific module(s).

You can find the assignments and portfolio questions for this module, i.e. Project Procurement Management at the end of this tutorial letter.

- IT IS VERY IMPORTANT TO SUBMIT YOUR ASSIGNMENTS IN GOOD TIME SO THAT IT CAN BE EVALUATED. THIS MEANS THAT IT SHOULD REACH UNISA BEFORE THE DUE DATE
- PLEASE ENSURE THAT YOU SUBMIT THE CORRECT ASSIGNMENT FOR THE SEMESTER REGISTRATION PERIOD WHICH YOU HAVE REGISTERED FOR.
- TRANSFER OF DUE DATES FROM ONE SEMESTER TO THE NEXT SEMESTER REGISTRATION PERIOD WILL NOT BE ALLOWED
- IF YOU SHOULD SUBMIT YOUR ASSIGNMENTS BY USING THE WRONG REGISTRATION PERIOD'S DUE DATES, IT WILL BE CONSTRUED AS A NON-SUBMISSION AND YOU WILL BE AWARDED A ZERO MARK FOR THE ASSIGNMENTS

Assignment	FIRST SEMESTER Due date	SECOND SEMESTER Due
	if you are registered for the	date if you are registered for
	first semester	the second semester
01 Multiple Choice	14 March 2011	22 August 2011
(compulsory)	Unique nr: 215501	Unique nr: 168111
02 Multiple Choice	11 April 2011	12 September 2011
(compulsory)	Unique nr: 223434	Unique nr: 222787
03 Portfolio of Evidence	13 May 2011	28 October 2011
(compulsory)	-	

8.1 Due dates for the submission of assignments and portfolio of evidence

#### 8.2 Continuous evaluation

Each unit in the module contains a number of exercises and self-assessment questions for self-evaluation. You will, by studying the relevant unit find the solutions to those exercises and questions in the unit.

**Note:** It is impossible to cover the entire syllabus in one assignment. Therefore, for portfolio of evidence purposes, you are expected to know all the subject matter contained in the study material.

#### Explanation of the calculation of marks to pass this module

## You have to submit all the assignments, i.e. assignment 01 and 02 before the due dates. You will only then be allowed to submit the Portfolio of Evidence.

Year mark calculation:

#### 10% of Assignment 01 + 90% of Assignment 02 = Year mark, e.g.

Mark obtained for Assignment 01: 50% [10 percent of 50 % = 5] Mark obtained for Assignment 02: 60% [90 percent of 60% = 54] By adding the totals of the above calculations together, the year mark is determined. In this instance : 5 + 54 = 59%

#### Final mark calculation:

#### 10% of year mark + 90% of portfolio of evidence mark = Final mark, e.g.

Year mark: 59% [10 percent of 59% = 5,9] Portfolio of evidence mark\* 70% [90 percent of 70% = 63] By adding the totals of the above calculations together, the final mark is determined. In this instance :  $5,9 + 63 = \frac{68,9\%}{100}$ 

## \*The sub minimum requirement for the portfolio of evidence is 40%, i.e. your portfolio of evidence mark must be at least 40%.

#### To pass the module the <u>final mark</u> must at least be 50%.

The minimum requirement for the re-submission of the portfolio of evidence is 40%. Please note that you will only be allowed to resubmit your portfolio of evidence during the next semester.

If a re-submission of your portfolio is granted, the year mark (marks for Assignment 1 and 2) will be disregarded. Your year mark will not be taken into consideration when the final mark is determined. You will have to obtain 50% for the portfolio of evidence in order to pass the module.

#### 8.3 Submission of the assignment and portfolio of evidence

Before posting your portfolio, make sure that your portfolio is stapled and complete. UNISA cannot accept responsibility for bringing together parts of a portfolio if it was not originally posted as a complete document.

## Please do not submit duplicates of assignments and the portfolio, <u>except where you</u> <u>have been requested to do so</u> by your lecturer.

As assignments and portfolios can get lost in the post, it is a good idea to make and keep a <u>copy</u> of assignments and the portfolio before you post it.

#### 8.4 Assignment cover

NB: Make sure that you read the instructions on the assignment cover carefully before completing it. Complete the cover <u>correctly</u>.

Please make sure that the following information appears on the COVER of your assignment.

Name. Address (and postal code). Student number. Subject code (e.g. DAPM09V). <u>Correct</u> assignment number. Correct unique assignment number (applicable only to assignments 01 and 02).

#### 8.5 Presentation of the assignments and the portfolio of evidence

It is expected that your assignments and the portfolio are neatly prepared and comply with all the requirements. Assignments and the portfolio must **<u>not</u>** be submitted by fax or e-mail.

#### 8.6 Posting of the assignments and the portfolio of evidence

Please post your assignments and the portfolio in good time. Do not wait until the due date before posting it. Bear in mind the time it will take for your assignments and the portfolio to reach UNISA, depending on where you live. The due date is the date on which UNISA must receive your assignments and the portfolio.

The onus is on you to make sure that your assignments and the portfolio reaches UNISA. If assignments and the portfolio do not reach UNISA, it will be regarded as not having been posted at all. This is a standing rule at UNISA.

If you wish to enquire whether your assignments and the portfolio have been received, what mark you received for it or merely wish to inform us of a change of address, please contact the Unisa Contact Centre at (011) 670 9000 or 0861670411. You can also contact Ms Leonie Champion at (011) 471 2975 (email: <u>Lchampion@unisa.ac.za</u>) or Mr Mfihlo Tabane at (011) 472 3051 (email: <u>Tabanbm@unisa.ac.za</u>).

Assignments and the portfolio should be addressed to:

The Registrar PO Box 392 UNISA 0003

#### 8.7 Copying of assignments and portfolio of evidence

Should we find that you have copied another student's assignment or portfolio of evidence, both of you will receive 0 for that assignment and portfolio of evidence.

If you hand your assignment or portfolio to a friend to post for you and he/she copies it, both of you will receive a mark of 0% for that assignment or portfolio.

#### 8.8 Additional guidelines

#### Change of address

Do not note your change of address on your assignment. If you wish to inform us of a change of address, please contact Ms Leonie Champion at (011) 471 2975 or email <u>Lchampion@unisa.ac.za</u>. Please also state your old address and your student number in such a letter.

#### 8.9 Submission of assignments on myUnisa

It is now also possible to gain access to your academic record and submit your assignments via the myUnisa special web site for UNISA learners. This web site is available 24 hours a day, which means that you do not have to contact UNISA during office hours to obtain information on such aspects as assignment marks, portfolio marks, due dates and financial records (on the Internet). Registration is free and the web site's address is: <u>http://my.unisa.ac.za/.</u>

To do your assignments online, you can go to <u>https://my.unisa.ac.za</u> and register for myUnisa.

Once you are registered, you can login and the modules that you are registered for will be displayed in *tabs* at the top of the page. On the left side of the page you select Assignments, enter your student number and click on View. All modules that you are registered for will be listed. Follow instructions to complete and submit your assignments.

#### 8.10 Examination

Your portfolio of evidence serves as your examination for this module and must therefore be submitted before or on the due date. No late portfolios will be accepted.

#### 9. COMPULSORY ASSIGNMENTS AND PORTFOLIO OF EVIDENCE

There are two compulsory multiple choice assignments and one compulsory portfolio of evidence (assignment 3) set for this module.

#### 9.1 Assignment 01: multiple-choice questions (compulsory)

UNIQUE NUMBER FOR THE FIRST SEMESTER: 215501 UNIQUE NUMBER FOR THE SECOND SEMESTER: 168111

DATES OF SUBMISSION: First semester: 14 March 2011 Second semester: 22 August 2011

Mark the letter of your choice on the computer mark reading sheet provided. Choose between "1" for a true statement and "2" for a false statement. Also remember to write the correct unique number for this assignment on the mark reading sheet.

1. As public sector project managers, time, cost and quality is of the essence in the execution of a project.

1. True 2. False

- 2. High-end user institutions can only be defined by the size of its projects.
  - 1. True
  - 2. False
- 3. All of the project management software packages will produce Gantt and PERT charts or some sort of graphical presentation of your Work Breakdown Structure.
  - 1. True
  - 2. False
- 4. The first step before purchasing your required software is to think about how you plan and manage projects.
  - 1. True
  - 2. False
- 5. One of the benefits of using Project Management Software is that the software has the capacity to process large projects with 10 000 + activities.
  - 1. True
  - 2. False
- 6. Microsoft Project 2007 is a powerful application that one can use to efficiently plan, manage and communicate project information.
  - 1. True
  - 2. False
- Microsoft Project 2007 is fully compatible with Open Database Connectivity (ODBC) databases, and provides built-in Microsoft Visual Basic Editor for Applications for all customization needs.
  - 1. True
  - 2. False
- 8. With MS Project 2007 it is difficult to organize and keep track of projects at all levels of complexity.
  - 1. True
  - 2. False
- 9. Using Microsoft Project 2007, you can communicate important project information to every member of your team.
  - 1. True
  - 2. False

- 10. One of the keys to using Microsoft Project 2007 is to understand scheduling techniques.
  - 1. True 2. False

#### 9.2 Assignment 02: multiple-choice questions (compulsory)

#### UNIQUE NUMBER FOR THE FIRST SEMESTER: 223434 UNIQUE NUMBER FOR THE SECOND SEMESTER: 222787

DATES OF SUBMISSION: First semester: 11 April 2011 Second semester: 12 September 2011

Mark the letter of your choice on the computer mark reading sheet provided. Choose between "1" for a true statement and "2" for a false statement. Also remember to write the correct unique number for this assignment on the mark reading sheet.

- 1. Material resources are consumables that you use up as the project proceeds.
  - 1. True
  - 2. False
- 2. In Microsoft Office Project 2007, a task normally has work associated with it after a work resource (people and equipment) has been assigned to the task.
  - 1. True
  - 2. False
- 3. The ability to track actual work in a project plan is a major disadvantage in Microsoft Office Project 2007.
  - 1. True
  - 2. False
- 4. Printing information from a project plan to share with stakeholders is a common activity for most project managers.
  - 1. True
  - 2. False
- 5. When addressing schedule problems, it is useful to evaluate your plan in terms of time, cost, and scope: the three sides of the project triangle.
  - 1. True
  - 2. False

- 6. ACWP = Budgeted Cost Of Work Schedule.
  - 1. True
  - 2. False
- 7. The completion of one task in a project might enable the start of a task in another project.
  - 1. True
  - 2. False
- 8. A person or a piece of equipment might be assigned to a task in one project, and you need to delay the start of a task in another project until that resource completes the first task.
  - 1. True
  - 2. False
- 9. A project is the same as an ongoing operation. Both have an end date.
  - 1. True
  - 2. False
- 10. Project scope describes the work required to deliver a product or service with the intended product scope.
  - 1. True
  - 2. False

#### 9.3 Portfolio of Evidence (Assignment 03- compulsory)

DATES OF SUBMISSION: First semester: 13 May 2011 Second semester: 28 October 2011

#### What is a Portfolio of Evidence? (PoE)

There are a number of different types of PoE's. In general a PoE describes your relevant experience, identifies and analyses your learning achievements and provides proof (in the form of a document) that you have the skills that you claim to have attained.

This portfolio is a learning and reflective portfolio, which offers evidence on learning and development in relation to certain standards and achievement of learning outcomes as required by UNISA. The PoE encourages and documents reflection and self-evaluation and provides evidence of the achievement of learning outcomes. It should also inform and impact on your careerrelated skills, goals and experiences. The portfolio must adequately:

- Identify/describe your relevant learning accomplishments (knowledge, skills, competencies, abilities); and
- Show a match between learning achievements and the requirements of the programme.

#### ASSIGNMENT 03 (PORTFOLIO OF EVIDENCE)

The Department of Public Works in Mpumalanga's mandate is to construct and implement projects through the Expanded Public Works Programme. The local municipality with the consultation of the community, have identified the need of a community hall.

- The Department has received a budget of R13 million to complete the project.
- The time duration for the project is 18 months, starting date: 1 February 2011.
- You have been appointed as the project manager.

#### **IMPORTANT GUIDELINES REGARDING ASSIGNMENT 3 (PORTFOLIO OF EVIDENCE)**

#### The following guidelines apply to the portfolio:

• Analyse the portfolio question(s) properly and make sure that you understand what is required.

Note that the portfolio answer must be not longer than 50 typed A4 pages in length

The following requirements must be followed in compiling and submission of the portfolio answer:

- The portfolio **must be typed** in 12 font size with 1<sup>1</sup>/<sub>2</sub> line spacing.
- **Correctly numbered** headings and sub-headings must be used throughout the portfolio.
- **Text references** must be included where applicable to acknowledge all sources. Also refer to the booklet "UNISA Reference Method" which is included in the study package, for more information.
- A correctly compiled List of References must be included at the end of the portfolio.
- Annexures could be attached to the portfolio, but must be numbered clearly.
- The **portfolio length** should not exceed 50 A4 pages in total.
- Only **printed copies** of portfolio will be accepted. Electronic copies, send by email or

on compact disk, will not be accepted.

- If you don't have access to Microsoft Project 2007 on your PC, you still need to prove that you understand the different steps in project management by drawing the diagrams (manually), e.g. WBS, using the numbering system, scheduling (time management), Gantt charts, etc.
- Remember that this is a practical project that you, as the appointed project manager, have to provide all the steps in project management, to make this project a success. This is not an assignment or a business plan. Concentrate on the following:
  - The practical project and not the theory of project management
  - If you can apply the theory (which you studied in your previous modules) of project management to this project (the building of the community hall)
  - The different steps of project management in a logical order
- USE "THE GUIDELINES FOR THE COMPLETION OF YOUR PORTFOLIO" (ANNEXURE A) WHEN DOING YOUR PORTFOLIO
- Remember to place your portfolio of evidence answer in an assignment cover, provided for this purpose.
- Consult as many sources as possible and not only the study material.

#### 9. CONCLUSION

Now that you are familiar with the contents of this tutorial letter, you can start your studies. To obtain a comprehensive view of the module, I suggest that you read through the study material first in order to orientate yourself with the contents of the module and context in which it is written.

I wish you success in your studies. I trust that you will work conscientiously.

• Mr Barry Nkgabe, Tel.: (012) 429-6467 bnkgabe@unisa.ac.za

• Mr Lekgolo Phosa, Tel.: (012) 429-6422 Lphosa@unisa.ac.za • Prof Kobus Wessels, Tel.: (012) 429-6099 Wessejs@unisa.ac.za

• Prof Dirk Brynard, Tel. (012) 429 6393 brynadj@unisa.ac.za

• Mr Alfred Matthews, Tel.: (011) 471-2357 amatthew@unisa.ac.za

• Ms Anne Barnes, Tel.: (012) 429-6939 abarnes@unisa.ac.za



Education is not received. It is achieved. (Author unknown)

Education is the most powerful weapon which you can use to change the world. (Nelson Mandela)

We cannot learn without pain (Aristotle)

### ANNEXURE A: GUIDELINES FOR THE COMPLETION OF YOUR PORTFOLIO (PROJECT)

#### Before you start with your project, ask yourself; what is a project?

"A project is a unique process, consisting of a set of co-ordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements including the constraints of time, cost and resources."

You can also add the following notes:

- 1. An individual project may form part of a larger project structure.
- 2. In some projects the objectives and scope are updated and the product characteristics defined progressively as the project proceeds.
- 3. The project's product may be tangible or intangible.
- 4. The project's organisation is normally temporary and established for the lifetime of the project.
- 5. The complexity of the interactions among project activities is not necessarily related to project size. (Lockyer & Gordon, 2005:1)

# PROJECT MANAGEMENT IS THUS CONCERNED WITH THE INTRODUCTION AND MANAGEMENT OF CHANGE.

According to (Knipe & Van der Waldt, 2001: 60), a project is carried out within predetermined guidelines or parameters such as the following:

- a statement of the end product/result;
- a fixed time for achieving/completing the end product or result
- a budget
- standards/criteria such as quality, quantity, flexibility, resources, community participation and policy.

Cleaning the house is not a project because that is something you do everyday, but renovations to the house, is a project. You don't do that everyday.

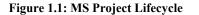
#### How does a project differ from a programme?

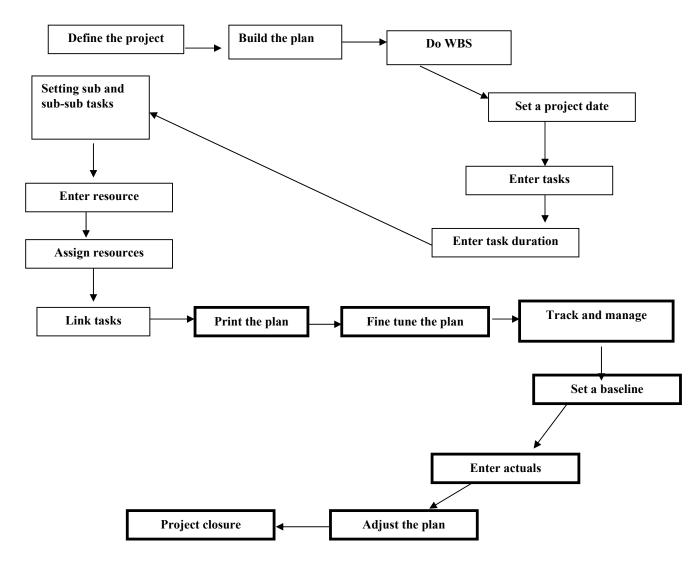
A programme does not have a specific finishing date and can carry on over a long period of time. For example, the National AIDS programme. Every province can have an AIDS project, which forms part of the National AIDS programme.

A large project (e.g. building of a hotel complex) may be subdivided into a number of smaller related projects (sub-projects) to achieve a single common goal, for example, the building of the hotel, landscaping and the interior decorating.

Start and finish	A project has a clear start and finish
* Life cycle (see fig.3.3 below)	A project has a beginning and an end, with a
	number of distinct phases in between
Schedule and Timeline	Projects are often time-limited. This means
	they must finish by a certain date
Budget	Projects have a clear budget, often broken
	down to a budget per work package
Non-repetitive	Activities are essentially unique and non-
	repetitive
Resources	Resources may be sourced from different
	functional departments and need to be co-
	ordinated
Single point of responsibility	The project manager, project leader or project
	entrepreneur are responsible for the whole
	project
Teams	Project teams are formed to complete the
	project

#### REMEMBER THE FOLLOWING SPECIAL FEATURES OF A PROJECT:





\* **PROJECT LIFE CYCLE** refers to the stages in a project's development. Life cycles are important because they demonstrate the logic that governs a project. They also help us develop our plans for carrying out the project. They help us decide, for example, when we should devote resources to the project, how we should evaluate its progress, and so forth. A project life cycle can be divided into four distinct phases:

1. Conseptualisation refers to the development of the initial goal and technical specifications for a project. The scope of the work is determined, necessary

resources (people, money, physical plant) identified, and important organizational contributors or stakeholders signed on.

- 2. Planning is the stage in which all detailed specifications, schematics, schedules, and other plans are developed. The individual pieces of the project, often called work packages, are broken down, individual assignments made, and the process for completion clearly delineated.
- 3. During execution, the actual "work" of the project is performed, the system developed, or the product created and fabricated. It is during the execution phase that the bulk of project team labour is performed. Project costs ramp up rapidly during this stage.
- 4. Termination occurs when the completed project is transferred to the customer, its resources reassigned, and the project formally closed out. As specific sub-activities are completed, the project shrinks in scope and cost decline rapidly.

-----

#### COMPLETING YOUR PROJECT

- 1. Follow the steps as per your instructions in this tutorial letter (IMPORTANT GUIDELINES REGARDING ASSIGNMENT 3 (PORTFOLIO OF EVIDENCE)
- 2. Remember to have a table of contents (list all the headings under the table of contents), number all the headings, number all the pages and do a bibliography at the end of your project.

**Remember this is a project and NOT an assignment or a business plan.** Concentrate on the following:

- the practical project and not the theory of project management.
- if you can **apply the theory** of project management to your real project.
- the different steps in project management in a logical order!

Your first page must include the **Title of the Project**, followed by the **duration of the project** (starting date and finishing date), the **budget** of the project, and the name of the **Project Manager**.

E.g.

Title of project: Duration: Budget: Project Manager:

#### 1. Problem statement and aims of the project

Why do you need to do this project? Give some background information and mention the feasibility study. Remember the lead up to the feasibility study (from the clients' perspective) is the formalising of the project with the project charter. The project charter outlines the purpose of the project and what it is meant to achieve. Also called terms of reference, or project mission.

### (Example of a project charter) PROJECT CHARTER

	Date Raised:
Number:	Project Name:
Compiled By:	Approved By:
Project Description:	
Outline how you WILL respond to the	
problem or opportunity.	

**Project Charter**: Shows the official recognition of the project

The project charter should be a tightly worded document outlining what is to be done and the boundaries of the project. For example, the project could be to write a fashion book for the academic market, 200 pages, colour, sell for R400.00 project managed (editor) by Anne Barnes, and be ready for the beginning of the academic year.

Unless the aims of the project can be precisely defined in a few short words it could imply that you are not exactly clear what you want to achieve. The project charter should also include:

- The background to the project
- The key assumptions
- The business and other needs
- The scope of the work
- Identifying key activities, budgets and dates
- Comments on how the project is to be managed
- The role of the project manager (responsibility and authority) and reporting structure).

The project charter essentially formalizes the projects and should be documented and signed off.

#### 2. <u>The objectives of the project</u>

The project objectives should clearly describe what is to be achieved and how and when it is to be achieved. It is essential that the objectives be challenging, but also quantifiable and achievable. Remember that once you have agreed to an objective, you are expected to accomplish it. These objectives must be measurable. Criteria or standards must be determined for evaluating the results of the objectives. Examples of objectives include the following:

- to implement a new, more relevant computer programme before May 2008;
- to develop a training programme for each division in the institution by June 2008.

#### The S-M-A-R-T principles can be used to formulate objectives:

Specific:	the more precise the target, the greater the chance to hit it.
Measurable:	measure cost, quality quantity, time.
Agreed to:	make sure all necessary participants agree.
Reachable:	if you can't get there at all, it's hardly worth trying.
Timely:	a well-defined deadline helps everyone know what is expected.

#### 3. Strategic linkage in institution

The word "strategic" indicates a change or transformation of the whole institution's vision, mission and aims. Explain how your project will bring about change in your institution.

#### 4. Project scope

This is the process to ensure that the project includes all the work required, and only the work required, to complete the project successfully. It is primarily concerned with defining and controlling what is or is not included in the project. Scope management defines what the project will accomplish, what it will deliver, what it will produce and where the work packages start and finish. As the project progresses, the scope statement may need to be revised to reflect changes to the scope of the project.

#### 5. <u>Project team set-up</u>

According to Burke (2007:320), a project team may be defined as a number of people who work closely together to achieve shared common goals. Project teams are an efficient and effective way of managing projects, where efficiency implies performing the work well, and effectiveness implies performing the right work. Under this heading you must indicate who your team is, who is responsible for what and the reasons why you appointed that specific person on your team.

#### 6. Planning the project

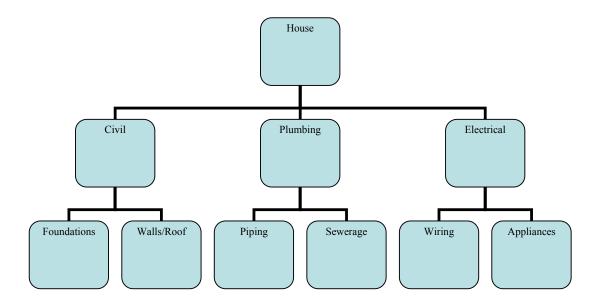
Remember the following: a project plan in its simplest form is an attempt at a timetable for all the activities, which make up the project. It forms the first major step in the project management process, and sets out "how", "who does what" and "when".

#### 6.1 Work breakdown structure (WBS)

The purpose of a WBS is to subdivide the scope of work into a number of manageable work packages, a list of jobs, or a checklist that makes it easier to estimate, easier to plan and easier to assign the work to a responsible person or department for completion. The breakdown structure should also strive to group similar work together to improve productivity and the efficient use of resources. The WBS is the backbone of your project. Without an effective backbone your project has no structure to plan and control all the parameters of time, cost, quality, procurement and resources.

There are two methods of presenting the WBS:

#### Graphically in boxes



House Project WBS Subdivided into Boxes

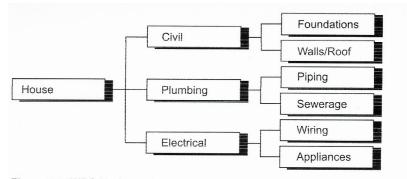


Figure 9.2: WBS Horizontal Presentation - shows a simple rotation of figure 9.1

Or

#### **Text indents**

#### 1.0.0 House Project

- 1.1.0 Civil
  - 1.1.1 Foundations
  - 1.1.2 Walls and roof

#### 1.2.0 Plumbing

- 1.2.1 Piping
- 1.2.2 Sewerage

#### 1.3.0 Electrical

- 1.3.1 Wiring
- 1.3.2 Appliances

With each level of the WBS the scope of work is subdivided into more work packages with a corresponding increase in the level of detail. For practical purposes three or four levels should be sufficient to achieve the desired level of planning and control – any more than that and, like a pyramid, the base of the WBS would start to become unwieldy. The number of levels is influenced by:

- Level of detail
- Level of risk
- Level of control
- Estimated accuracy
- Work package value
- Work package man-hours

If more than three or four levels are required this can be addressed by using sub-projects, where the lowest level work package of one project constitutes the highest level of another project. This situation is common on projects where a main contractor uses many subcontractors.

#### 6.1.1 The numbering system

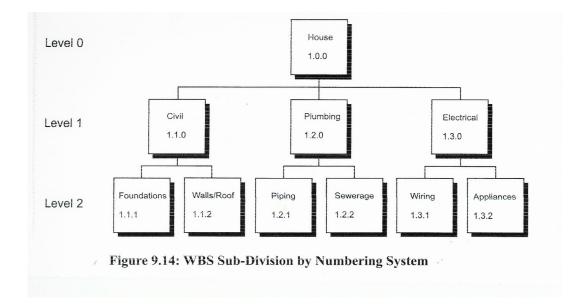
One of the beneficial features of the WBS is its ability to uniquely identify by a number or code all the elements of work in a numerical and logical manner. With a unique number, all work packages can be linked to the project's schedule, purchase orders, resources, accounts, together with the corporate accounts and the client's accounts.

The numbering system can be alphabetic, numeric, or alphanumeric (letters and numbers). Example:

**Level 0:** The first number [1.0.0] represents the first work element on the level zero. It is normal practice to have only one item at this level i.e. the total project.

**Level 1:** At the first level of subdivision the first work element will be numbered [1.1.0] and the second work element numbered [1.2.0]. Thus the other work elements will be numbered sequentially; [1.3.0], [1.4.0], [1.5.0] etc.

**Level 2:** These numbers are then further subdivided at the second level from the first element at the second level into [1.1.1], [1.1.2], [1.1.3], [1.1.4] etc.



#### 6.2 Scheduling (time management)

The following practical steps can be taken to schedule a project:

 Identify the activities. Divide the project into logical activities. Each activity is specialised and may have to wait for a preceding activity to be completed before being carried out. It is advisable to assign activities to responsible people at this stage.

٠

- Plan starting and completion dates. Plan the starting dates of each activity. Note that some activities can start immediately because they don't depend on the completion of preceding activities. Activities may therefore overlap. The starting dates of other activities may depend on the completion dates of preceding activities.
- Estimate the duration of each activity. Calculate how many days per week are needed to complete an activity. Duration may also be calculated in hours for a more accurate picture.
- Modify the schedule as necessary. Once the various interest groups have been consulted, the provisional schedule may need to be modified.
- Prepare the schedule. The Gantt chart can now be drawn (see example of Gantt chart). As the project progresses, its actual state should be indicated in the centre of

the chart. The process needs to be monitored constantly to take corrective steps if there are any deviations from the planned chart.

Distribute the schedule to all team members and the community (if you do a community project). Once the schedule has been completed and the Gantt chart drawn, they must be distributed to all team members. They could also be distributed among the community or to heads of department of the institution to ensure transparency. The Gantt chart is a useful way of giving regular feedback on the progress of the project to the community of policy-making body of the institution.

# The three main variables in project management, i.e. time, cost and resources, must be planned carefully, (Van der Waldt & Knipe, 2001:74)

	Мо	Tu	W	Thu	Fr	S	Su	Мо	Tue	We	Th	Fri	Sa	Su
Activity	n	е	ed	r	i	at	n	n		d	ur	13	t	n
	2	3	4	4	6		8	9	10				14	
						7				11	12			15
	-													
Analys														
es														
				_										
Project														
team														
Plannin														
g														

Example of a basic schedule:

#### 6.3 Gantt chart

Gantt charts are one of the most widely used planning and control documents for communicating schedule information accurately and precisely. The Gantt chart lists the activities (scope of work) in the left-hand column, against a time scale along the top of the page. The scheduling of each activity is represented by a horizontal line or bar, from the activity's start to finish. The length of the activity line is proportional to its estimated duration. The calendar time scale is usually presented in days or weeks, but hours,

months and years are also possible. The Gantt chart provides further information in visual format, thus making it more suitable for controlling the project. Each activity is numbered and described and its duration is indicated. Control is made easier because the Gantt chart also provides for planned and actual progress.

Activity	Progres	Мо	Tue	We	Thur	Fr	Sa	Su	Мо	Tue
	s	n	s	d	s	i	t	n	n	s
		1	2	3	4	5	6	7	8	9
010	Planned									
Buy	Actual									
Computer										
S			-							
011	Planned									
Remove	Actual					•				
old										
system										
012	Planned					ł				
Install new	Actual									
system										
013	Planned									
Evaluate	Actual									
and										
monitor										
		•	•	•	<u> </u>	•	•	•	•	•

#### Example of a Gantt chart

Time now

According to the Gantt chart above, activity 010 was completed on schedule, i.e. what was planned was achieved. Activity 013 should have started and been 50 per cent complete by now. In reality it is only 25 per cent complete and therefore behind schedule. The reasons for this should be investigated and corrective steps should be taken as soon as possible.

#### 6.4 PERT (Programme Evaluation and Review Technique)

PERT (also known as the Activity-on-Arrow Network, CPM – Critical Path Method) is a project management technique for determining how much time a project needs before it is completed.

The WBS provides a structured breakdown of the scope of work into manageable work packages that can further developed into a list of activities (See 7.2 WBS). The next process is to establish a logical relationship between the activities using a network diagram. The network diagram may be defined as a graphical presentation of the project's activities showing the planned sequence of work. In its simplest form only two items of information are required:

- List of activities
- Logic constraints, also called logical links, logical dependency or logical relationships between the activities

The network diagram is a development of the activity-on-node (AON) concept where each activity is represented as a node or a box.

Each activity is assigned a best, worst, and most probable completion time estimate. These estimates are used to determine the average completion time. The average times are used to figure the critical path (the path or sequence of activities which represents the longest total time required to complete the project). A delay in any activity in the critical path causes a delay in the completion of the project) and the standard deviation of completion times for the entire project.

The formula to determine the most probable completion time estimate is the following:

- **Step 1:** Make three estimates:
  - **M** = the most likely duration
  - **O** = the most optimistic duration (5% deviation)
  - **P** = the most pessimistic duration (5% deviation)

**Step 2:** Use the following formula to calculate E (estimated duration):

$$E = O + P + (4 \times M)$$

6

Earliest	Duration	Earliest		
start time		finish time		
Activity number				
Activity des	cription			
Resources required etc.				
Latest	Total	Latest		
start time	float	finish time		

#### 7. <u>Costing the project</u>

A budget is the original estimated cost of the project built up from estimates of activity (labour), material and equipment needs. Remember to make allowances for risks and uncertainties (contingencies).

#### 7.1 <u>Itemised budget</u>

Your itemised budget must be broken down to a budget per work package.

#### 7.2 <u>Relevant Reports where applicable</u>

Your project can include the following reports where relevant:

- BCWP Budgeted cost of work performed
- ACWP Actual cost of work performed
- BCWS Budgeted cost of work scheduled

#### 8 <u>Project risk management plan</u>

Risk management can be defined as the processes concerned with identifying, analysing and responding to uncertainty [throughout the project lifecycle]. It includes maximising the probability and consequences of positive events and minimising the probability and consequences of adverse events to the project objectives. Project risk can be defined as factors that may cause failure to meet the project's objectives. (Burke, 2007:117).

#### 8.1 <u>Risk identification</u>

Having defined the project's objectives, the next step is to identify the risks and uncertainties that could prevent you achieving these stated objectives.

Risk identification should be a systematic process to ensure nothing significant is over looked. Techniques for identifying risk include:

- Analysing historical records (closeout reports)
- Structured questionnaires
- Structured interviews
- Brainstorming
- Structured checklists (WBS)
- Flow charts
- Judgement based on knowledge and experience
- System analysis
- Scenario analysis ( what-if)

Besides project risks there are a whole range of other risks to consider:

BUSINESS RISKS – Competition, product liability, new technology

PERSONAL RISKS – Poor information, employee dishonesty, key team members leaving

FINANCIAL RISKS – Bankruptcy, bad debts, cashflow

PROPERTY RISKS - Fire, floods, theft

#### 8.2 <u>Risk quantification</u>

Having identified a range of risks, the next step will be to quantify the probability of the risk occurring and the likely impact or consequences to the project, or the amount at stake. Risk quantification is primarily concerned with determining what areas of risk warrant a response and where resources are limited – a risk priority will identify the areas of risk that should be addressed first.

It is often very difficult in practice to put an exact number to a risk. To overcome this problem start by ranking the risks (high/medium/low risk), and see if that highlights the high-risk work packages.

#### 8.3 <u>Risk response</u>

Having identified, quantified and prioritized the risks, you now need to develop a risk response plan, which defines ways to address adverse risk and enhance opportunities before they occur. There is a range of responses, which should be developed in advance during the planning phase:

- Eliminating risk look into ways of avoiding the risk completely by either removing the cause or taking alternative course of action.
- Mitigate risk this means reducing the risk probability and impact.
- Deflecting risk that is the transfer of the risk in part or whole to another party, for example contracting, insurance, etc.
- Acceptance here you accept the consequences of a risk occurring, also called selfinsurance. However, you may develop a contingency plan to protect your business from the risk event happening. A contingency plan defines actions you will take ahead of time – if "A" happens we will do "B".

#### 8.4 <u>Risk control</u>

The risk control function implements the risk management plan and makes it happen. The risk management plan needs to be communicated to all the project participants and where necessary, followed up with appropriate training and practice runs.

WBS	Objectives	Risk		Respond	1	Contro	ol
100	Data File Protective	Risk	losing	Back-up	data	Check	the
		the data	files	files		data fi	les have
						been	backed
						–up da	aily
200							
300							

Risk Control – shows how the risks will be controlled

#### 9 Project quality

Quality control is the process companies go through to confirm that the product has reached the required condition as determined by the specifications and the contract. Quality control defines the method of inspection (testing), in-process inspection and final inspection to confirm the product has met the required condition.

The required condition should be laid down in the scope of work, specifications, contract which all roll-up to form the project quality plan.

#### QUALITY CONTROL PLAN

Project:			Compiled		
			by:		
WBS	Description	Required	Level of	NCR (non-	Sign Off
		Condition	Inspection	conformance	(Accepted
		(Specification)		report)	by Client)
100	Surface	SA 2.5 standard	Hold point		
	preparation		inspection		
200	Paint	Check thickness	Hold point		
	undercoat	of paint. Check	inspection		
		ambient			
		temperature			
		and humidity			
300	Paint	Check thickness	Hold point		
	topcoat	of paint. Check	inspection		
		ambient			
		temperature			
		and humidity			

**Quality Control Plan -** shows the sequence of work, required condition and level of inspection.

#### 10. <u>Project communication plan</u>

A project communication plan pulls the project stakeholders together. The project manager and project office are the heart of the project's information and control system. It is the project manager's responsibility to not only develop the project organisation structure, but also to develop the project's communication plan and lines of communication. The communication plan should outline the following:

WHO	Lines of communication – sender and receiver – responsibility and authority, stakeholders
WHAT	Scope of communication, content and format
HOW	Email, document, telephone, meeting, presentation
WHEN	Schedule of meetings
FEEDBACK	Confirms message received and understood – document control, transmittals
FILING	Filing, retrieval, storing, back-up, disaster recovery

#### 11. <u>Reporting format and structures</u>

Project data can be collected, processed and reported in many ways. The format (structure), frequency and circulation of reports need to be established during the start up phase of the project. The reports should be designed to assist problem solving and decision-making by the various levels of management so that they can ensure the project will meet its stated goals and objectives.

- Status reports: this report quantifies the position of the project.
- Budget variance reports: this report quantifies the difference between actual and planned, for example, the revised budget being compared with the original budget. The variance is simply the difference between the two values.
- Trend reports: the status report tells the manager where the project is, but not where the project is going. The trend report uses historical data and extrapolates this forward to give the manager a feel for the direction of the project.
- Earned value reports: this report integrates the variable parameter of cost with time. This report is also used to integrate man-hours and time.
- Exceptional reports: this report is designed to flag an occurrence or event which is outside-predetermined control limits. For example the planner may be requested to report on all activities that have a float less than 5 days ---this could highlight all the activities that could go critical in the next week.
- Monthly reports: on a long project, monthly reports give the project manager and excellent forum to quantify what is happening on the project and report it to senior management and key stakeholders.

#### LIST OF REFERENCES (this must be typed on a separate page)

Burke, R. 2007. Introduction to Project Management: one small step for the project manager. United Kingdom: Burke Publishers.

Burke, R. 2007. Project Management Techniques. United Kingdom: Burke Publishers.

Lockyer, K. & Gordon, J. 2005. Project Management and Project Network Techniques (7<sup>th</sup> ed.). New York: Prentice Hall.

Van der Waldt, G. & Knipe, A. 2001. Project Management for strategic change and upliftment. Cape Town: Oxford University Press.

If you need any assistance in completing your portfolio (project), please don't hesitate to contact the lecturers.

Good luck!