

Laboratory Session 1 (a)

Student's handouts: Team Work and Management

Student Learning Outcomes (SLO):

This week's activities will focus on Learning Outcomes 5 and 7 as below-

1. 5 - Demonstrate self-directed learning related to solving problems in engineering.
2. 7 - Work as a productive member of a team, recognising roles, responsibilities and accountabilities of individuals in a team.

Announcements:

1. *Bring a minimum of one laptop or tablet per Team to every lab to access the handouts. We recommend one device per student for optimum interaction.*
2. *Bring a minimum of **one printed copy** of the particular week's Student's Handouts per Team. Handouts will be available on Moodle the day before your lab.*
3. *Students must utilize e-Learning to survive in this subject.*
4. *Your report is to be submitted as a word file through Moodle. You should seek advice from your tutor before making your Team's submission meaning show them your report before submitting. (no submission for lab 1)*

ALWAYS READ CLASSROOM HEALTH AND SAFETY SECTION IN THE PROJECT HANDOUTS.

Task 1: Team formation

(10 minutes)

You will be assigned to a team in first lab class. Your instructor will help you forming your teams.

If your other team members do not attend in Week 1, your tutor will place you with another team of one or two for the first week only.

When you have formed into your Team, share introductions including what course you are studying and where you are from.

What needs to be done: Complete the Team Attendance Form (See ATTACHMENT 1:) and give the bottom half to your instructor before you leave. Make a copy for the top half of the attendance form for all team members.

Task 2: Team building Activity

(20 minutes)

This activity helps you to learn about each other's values and different problem solving styles. It also promotes teamwork.

Imagine you and your teammates are marooned on a deserted island. Discuss the implications of this in your team and come up with a response to the following - (20 minutes)

- What are your goals and the collective goal of your team?
- What four items would you have brought with you if you knew there was a chance you might be stranded? Note that you are only allowed four items per TEAM, not per person.

After an initial discussion, each team will present to the rest of the class what items they selected, explaining briefly why they chose them. (20 minutes)

TASK 3: First Team Meeting

(20 minutes)

Teams must start their first Team Meeting with these questions, *"Why do we need meetings?" AND "What problems make a team ineffective?"*

To ensure effective teamwork, the 4 C's are considered critical -

- **Clarity:** Goals and the process of achieving these goals are made clear.
- **Comradery:** (or Comradeship) Team members must work together to achieve the set goals and respect other team members.
- **Commitment:** All team members must be committed to reach the set goals and targets.
- **Communication:** A good team communicates well amongst themselves and with others.

Start your first Team Meeting by following the basic procedure for a meeting as follows -

1. **Plan:** Set an appropriate time and agenda for the meeting. Do not address the issues listed in the agenda yet. Delegate or assign key roles, chairperson, minute taker, members.
2. **Do:** For each of the issues or barriers listed in the agenda list all possible solutions or actions.
3. **Check:** Prioritise and validate all the possible solutions for each point in the agenda. Allocate ownership for each set of actions
4. **Act:** Now go away and act or work on the assigned set of solution and be prepared to present this at the next set date for a meeting.

The meeting reports or meeting minutes should include the following -

1. **Date:** Both date of meeting and date of typing up of meeting report
2. **Purpose:** The main reason for holding the meeting.
3. **Attendance and apologies:** List all that are present or missing.
4. **Follow up:** State the progress of actions identified in previous meeting.
5. **A list of actions:** (WHAT needs to be done) by listing all actions discussed including -
 - Ownership (WHO is to do it) by listing the ownership for each action listed.
 - Timing (WHEN it is to be done by) by stating the required completion time and date.
6. **Next meeting:** Setting a date for the next meeting is critical and an agenda should be circulated prior to this next meeting date.

Note: See ATTACHMENT 3 for an example of minutes of a meeting.

Discuss and **document** the following in your first meeting -

- **A Timeline:** A suitable draft timeline should be made with realistic milestones
- **An agreed method of correspondence:** Contact details should be exchanged.
- **Agreed Team Ground Rules:** Use the 'Team Ground Rules Contract Form'

These agreed ground rules provide teams a tool to resolve difficulties which may arise throughout the team activities.

(See ATTACHMENT 4)

Finally..... For your reports, keep in mind the following:

1. **All meetings should be documented coherently and attached as Appendix A.**
2. **Teams must add a completed copy of the Team Ground Rules Form as Appendix B.**
3. **All Teams to agree on a time and place to complete this first Team Meeting after class - before you leave!**

These notes are based on originals developed by Tim McCarthy, Richard Dwight and Cameron Lam, later updated by Carey Freeth, Josip Horvat, Tim McCarthy and Bruce Fowler. They have been updated and are used by Khaled El-Akruti in 2017 and by Sana Amir in 2019.

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ATTACHMENT 1:

Project : Title.....

TEAM ATTENDANCE FORM –

Make a copy of the information for each group member

Lab day: Time: Room: Lab session number:

Instructor's name:

Team letter: Name Email address Phone No. Best day for group meeting

Team members: 1.....

2.

3.....

Date, time and place of first team meeting to develop the report.:.....

Actions list and person responsible:

..

Project 1 Attempt A Balsa beam design and test

TEAM ATTENDANCE FORM

Lab day: Time: Room: Lab session number:

Instructor's name:

Team number: Name Email address Phone No. Best day for group meeting

Team members: 1.

2.

3.

Date, time and place of first team meeting to develop the report.:.....

..

Project 1 Attempt A Balsa beam design and test

TEAM ATTENDANCE FORM

Lab day: Time: Room: Lab session number:

Instructor's name:

Team number: Name Email address Phone No. Best day for group meeting

Team members: 1.

2.

3.

Date, time and place of first team meeting to develop the report.:.....

ATTACHMENT 2:

Material Request List (complete and give to your tutor)

Task 4: Project Title.....

Tutorial Number.....Team Number.....Tutor's Name..... Date.....

Please supply the following Balsa Beam construction materials -

1. Material 1.....

Section dimensions and length -.....

Quantity -.....

2. Material 2.....

Section dimensions and length -.....

Quantity -.....

Section dimensions and length -.....

Quantity -.....

Section dimensions and length -.....

Quantity -.....


Materials collected by -.....

Please note -

1. Material supplies are limited so please do not delay in collecting your order.
2. It is your responsibility to choose your materials wisely. Returns or refunds will not be considered.
3. Replacements for breakages and any additional Material Requests will be considered only at the discretion of the management.

ATTACHMENT 3:

Sample meeting report: Key things to document are – WHAT Action was decided, WHO is going to do it and WHEN does the Action need to be completed.

|  UNIVERSITY of WOLLONGONG MEETING REPORT | | Job No. : CM501 Page 1 of Report Date: 7/10/2007 Prepared by: C Lam | |
|--|--|--|--|
| Project: Richie Rich – Crude Piping | | Contract Ref: N/A | |
| Purpose: Progress | | Internal | |
| Place: Engineering Faculty RM 1.105 | | Meeting Date: 02/10/2007 | |
| Attendance: Name: Emilio Peterson Position: Estimator Company: UOW Tony Roche Project Engineer Jenny Thompson Workshop Supervisor Charlie Lamb Workshop Engineer/QA Apologies: None | | Minutes Issued To: All Attendees & C Cook | |
| AGENDA/SUMMARY OF ACTIONS | | | |
| ITEM | SUBJECT | ACTION | DATE |
| 1 | Crude Piping <ul style="list-style-type: none"> Order from Richie Rich/Job number to be established. Schedule/Priorities from T.S. Richie Rich | T.R./C.L. | 05.10.07 |
| 2 | Project Details <ul style="list-style-type: none"> Lump Sum Price = \$1,629,349.00 plus tundish 4 months delivery = 12,434 m/hrs 60 hrs per week working hours All materials free issue from Richie Rich (except pipe supports) Materials will be transported from Richie Rich on Backload from diesel pipe work delivery. Backload to be charged to Richie Rich. Tundish to be fabricated from 2mm galvanized sheet, touch up welds. Project budget very tight – need to look at all improvement opportunities. | T.R./C.L. | 05.10.07 |
| 3 | Workshop Improvements <ul style="list-style-type: none"> Workshop and yard drawing issued for mark up for proposed lay down areas and work stations. Remove any materials or equipment from yard not required to allow more room for storage and ease of movement. Use slewing crane for unloading and loading. Review if more pipe clamps required. Produce pipe cutting list. Set up cutting rack outside. Review if pipe storage racks are required and fab. Pipe end caps from Richie Rich. Use step deck trailer for other work so flat top can be loaded with pipes directly after painting. | T.R./C.L. TR./JT./EP./C.L. JT./T.R./C.L. J.T. J.T. JT/TR/CL J.T. J.T. T.R. J.T. | 08.10.07 12.10.07 12.10.07 10.10.07 05.10.07 |
| 4 | Resources <ul style="list-style-type: none"> Review Painting.Com ability to complete existing work and upcoming pipe work. Review availability/cost/quality of pipe fitters from Anthony Kim. | T.R./E.S. | |
| 5 | General Items <ul style="list-style-type: none"> Pipe cradles to be used for transport to site. Priority list of materials to be generated. Traceability & NDE | J.T. T.R./C.L. C.L. | 05.10.07 12.10.07 |
| Next Meeting: Thursday 11 th October 2007 at 2pm | | | |

ATTACHMENT 4:

ENGG102 Team Ground Rules and Contract Form

For a team to be effective it is a requirement that all team members understand their responsibilities to one another. It can be useful to discuss and agree certain project ground rules.

All team members agree to -

1. Come to class and team meetings on time.
2. Come to meetings with assignments and other necessary preparations done.
3. Respect one another.
4. Help each other when the need arises.

Additional Rules -

- 5.....
- 6.....
- 7.....

If a team member fails to meet these ground rules, other members are expected to take the following actions -

Step 1: (agreed action amongst the team and write it here)

.....

If not resolved -

Step 2: Bring the issue to the attention of the instructor. If agreed, actions to be taken -

.....

If still not resolved -

Step 3: Meet your Subject coordinator as a group.

Lab session Number:..... Team:.....

Member signatures:

- 1.....
- 2.....
- 3.....