Structured Team Work Guide, Spring 2018

Team work and team dynamics:
The lab assignments in WSE 324 are performed in teams of three or four students.

Important outcomes for this course are learning from your team experiences and being able to solve problems collaboratively, as well as growing as a learner. Collaborating with others and contributing positively to support your team and its goals are as important as writing the reports. The process of collaboration, therefore, is recognized as a distinct outcome.

The teamwork is structured following the cooperative learning methodology developed by R.M. Felder (www.ncsu.edu/felder-public/Cooperative_Learning.htm), which proposed a set of rules and specific roles for each team member to play. The teams of 3 or 4 are expected to form spontaneously. The instructor may help out in this process. Generally teams should have well defined memberships and roles for the duration of one lab cycle (from the beginning of one lab meeting to the submission of lab report). There is a clear advantage in forming a permanent group for the entire term, but it is not strictly required. The team membership and the roles of each individual in the team as assigned for given lab must be reflected in the lab report.

The general features of the teamwork are outlined below:
1. Teams will function on a weekly schedule and will maintain their membership and team role division throughout the weekly lab cycle (from the beginning of one lab meeting to the submission of lab report)

2. Each team member has a role to play and guidelines for what that means (see the attachments).

3. Each team member is expected to contribute equal effort to the lab exercise and to the report.

4. Team work may at times be frustrating. If you feel frustrated with your team or an individual team member, first think how to contribute in a way that puts the team on the right path (without taking everything on your shoulders which will be considered a bad team strategy or calling the cavalry to fix the team dynamics for you).

5. Please report serious problems or dysfunctions to the instructors as soon as you are aware of them. (Let’s shovel our piles while they are small.)

The teamwork is to be documented on several levels.
1. Regular weekly lab meetings will be documented in the team evaluation and self evaluation forms (templates in the attachments). The editable form is available in Canvas.
   a. The team as a whole should contribute to filling out the team meeting report form at the end of each lab meeting. This report should not take more than 3 minutes of
meeting time to complete. These forms will not be graded for their content, but the timely and faithful submission will contribute to the final participation grade. (see the attachment for details)

b. In addition, each team member should file a self evaluation form. Its primary purpose is to allow the instructors an insight in your personal progress as a team player and help to keep the process on track. You should not spend more than two minutes filling out this form. It will not be graded in and of itself, but the faithful submission will be considered in the participation grade.

As said, these two forms are confidential and should be submitted by each team member as an attachment to the regular lab report. (see the attachment for details)

2. The teams prepare one weekly lab report per team, although each team member is responsible for submitting his/her copy to the Canvas system. Authorships and other forms of contributions (like labor distribution in the lab) will be identified in a table at the end of the report. See the Report Template for detailed instructions.

Participation:
All members are expected to participate in the lab activities, further processing of the data, writing the report, and contribute to the success of the team.

Each team will develop specific criteria for dismissing an exceptionally uncooperative member (subject to approval by the instructor). See the attached dismissal policy agreement template. The dismissed team member will be responsible for compiling and submission of his/her own lab report.

Grading
The grades based on a composite of the team products (all team members share the same grade) and individual participation and contribution (each team member graded individually).
ATTACHMENT #1: TEAM DISMISSAL POLICY

Team Number: ________________________

Teams work most productively when members attend class, take part in out of class meetings, stay in contact with other team members, and hold each other accountable for the entire team performance.

In order to avoid conflict or confusion, teams often create a policy that the members can follow in order to dismiss a member if he/she fails to perform at an acceptable level despite earlier attempts to correct the situation within the team. Below is a sample Team Dismissal Policy, which you can edit to adjust to the specifics of this class and your specific Team environment. If you decide to modify the policy below, please turn it in to the instructor for approval before you sign. Dismissal is meant as the last resort tool for restoring team functionality.

Sample Team Dismissal Policy
1. Unexcused Absences:
   a. More than ___ unexcused absences from teams meetings will result in being dismissed from the team. Unexcused absences include in class time as well as out of class meetings.

2. Failure to perform. Team member fails to perform when assigned and accepted team tasks are not completed timely, and/or are performed neglectfully to the point, where the team grade is seriously jeopardized (more than ____ %):
   a. The first time a member is noticed not performing his/her job in or out of class, a team meeting to discuss it will be called to explain the issue. On the second noted case of failure to perform, the instructor will be notified. The third failure will result in dismissal from the team.

We, the members of Team _______, have written/accepted, read and understood the above policy, and we agree to abide by its terms. We understand that if a team member becomes a candidate for dismissal, he/she has the right to make an appeal to the Instructor. We also acknowledge that the Instructor will not deviate from the terms of this Team Dismissal Policy when listening to appeals. Moreover, we agree that this agreement in no way absolves a student form his/her regular responsibility of attending labs and filing in reports. We understand that a student may FAIL the course if he/she accrues excessive absences. We recognize that if a student is dismissed from a team, he/she will still have to complete the course assignments, but will have to do so on his/her own.

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I have read and approved this Team Dismissal Policy

Name       Date

Name       Date
ATTACHMENT #2: Guidelines for productive meetings:

If you feel that it is necessary to have a team meeting outside of the regular lab/class meeting time it may be useful to follow these guidelines:

1. **Plan the meeting ahead of time and come prepared:** It is the captain’s responsibility to prepare the agenda and topics for the meeting, to assess how much time will be needed to discuss all items, and to communicate it to the team members when calling the meeting. It is the team members’ responsibility to show up on time and come prepared.

   The agenda should be made before each meeting. Make copies of the agenda for each of your members. This gives an overview of the meeting and a place to take notes. The Agenda Should Contain the Following:
   a. Review of the agenda (make sure you can complete the meeting in the assigned time, be open to changes and updates)
   b. Summarizing the tasks and assignments from the last meeting
   c. Old Business: report the progress on the assigned tasks
   d. Discussion leading to…
   e. New Business: Revision of the general objectives, approach, long term tasks, tasks and assignments for the next week (“action items”)
   f. Special Announcements
   g. Draft the Team Meeting Report and vote on the group meeting self assessment items

2. **Meeting Flow:** The Captain is responsible for guiding the flow of the team meetings. To do this effectively, use the following guidelines:
   a. Remain impartial
   b. Recognize all who have comments or questions
   c. Keep the group on the topic at hand (make sure all agenda items are covered in a timely manner)
   d. Keep order in the discussion and be alert to members’ reactions
   e. Clarify questions. Re-state them, if necessary, to be understood
   f. Summarize the discussion as you go from one item to another
   g. Summarize the meetings outcomes

3. **Take notes:** Although it is the Recorder’s task to take notes and prepare meeting reports it is good practice for all members to take notes during the meeting. Comparing the notes may help the Recorder to have more complete record of the meeting and include other team members’ perspective.

4. **Keep track of time:** Start all meetings on time and finish on time.
ATTACHMENT #3

Team Evaluation Report

Lab # ___ Date ____________________

Team Members/Roles:

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Team Rubric: The team as a whole is to select the number which best reflects your team's performance over the past week, including Lab activities and Lab Report preparation. *(if there is a tie vote, the Reflector gets to break the tie but can record that there was a tie).*

Mark with an “x” the column that best reflects your assessment of the team performance:

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If you have any other comments, please write them on the back of this sheet.

**Insights:**

1. What insights did your team have about the teaming process?

2. What can the team do to improve its performance in the future?

3. What are the specific strengths of your team?
Instruction:
The Team evaluation forms are designed primarily to help you in the process of learning the difficult art of team work. Self assessment (as teams or as individuals), conscious reflection on the team dynamics, recording your goals and checking how they are met from one meeting to another are useful tools in the process. They ensure quick progress. It works best if you:

1. fill the forms at the end of the lab meeting or right after the last contact before submission of the lab report when all the good ideas and impressions are still in your heads (letting couple days to pass between the meeting and filling in the report is of little help)
2. think of yourselves (teams or individuals) as the ultimate addressees – chart down things you would like to remember, do, improve when meeting the next time
3. if you run out of space attach additional sheet of paper; you can attach a copy of your meeting notes
4. retain a copy of your team self-evaluation form for your record
5. discuss/vote on the team report
6. read the stuff and refresh your memories as you meet for the next lab

Note the internal logic of the team meeting report:

1.-3. This sections are concerned with the team dynamics beyond the actual topic of the lab. Focus on your experience as a team and the aspects of team chemistry that make you strong or pose a problem. Try to discuss ways of improving your performance in the areas of weakness.

The weekly submission of the team evaluation forms and team meeting reports allows the instructors to monitor the group dynamics and provide most effective support when needed. It also ensures that you are not tempted to skip the procedure.
ATTACHMENT #4

Self-Evaluation Form

Lab #___ Date___________________

Name:
Team Role played:
Team Number:

Use complete sentences to answer the following:

1. What are my greatest strengths in the group, and what have I contributed to the group in the Lab today and over the past week? (two to three sentences).

2. What areas can I work on to improve my performance next week?

3. What will I try to accomplish before the next Lab?

4. Please rate yourself today:

Mark with an “x” the column that best reflects your self-assessment as a team member:

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5. What insights did I have regarding teaming and my participation in this process?
**Instruction:**

Self evaluation forms are designed primarily to help you in the process of learning the difficult art of team work. Self assessment (as teams or as individuals), conscious reflection on the team dynamics, recording your goals and checking how they are met from one meeting to another are useful tools in the process. They ensure quick progress. It works best if you:

1. Fill the forms at the end of the lab meeting or right after the last contact before submission of the lab report when all the good ideas and impressions are still in your heads (letting couple days to pass between the meeting and filling in the report is of little help)
2. Think of yourselves (teams or individuals) as the ultimate addressees – chart down things you would like to remember, do, improve when meeting the next time
3. If you run out of space attach additional sheet of paper; you can attach a copy of your meeting notes
4. Retain a copy of your team self-evaluation form for your record
5. Read the stuff and refresh your memory as you meet for the next lab

Keep in mind that the self-evaluation forms are designed as confidential documents. They should be filled in individually in a situation free from peer pressure. Therefore it is also best if they are submitted individually by each team member.

Sections in the self-evaluation form have some internal logic:

1. Section one should focus on your contributions as a team player. Your personal qualities and talents that add value to the team. You may list your specific tasks in here but it is not necessarily the point. Hopefully, with time you will notice that the list is getting longer and your contribution is becoming richer. You may discover that some qualities you would not normally associate with the team work come up very handy. Others may with time prove less useful than you thought.

2. This section helps you identify the weak spots in your team performance that could and should be improved on. Be honest with yourself. This form is confidential for a reason. Hopefully this section will shrink with time as you will see your team player skills grow.

3. This is not your team assignment list. This part should closely correspond with the previous section. Do not try to tackle all problems at once. Focus on a single thing you can change between now and the next week.

4. The self-assessment grade table is easy and self explanatory.

5. Here you are invited to express your reflection on your learning experience in the team environment. What have you learned from the process about the team dynamics and about yourself as a team player. Keep in mind that this is not a place for finger pointing. However do not be afraid to be a whistle blower if you see problems that the team as a whole has hard time to acknowledge. We can help you get back on tracks.

The weekly submission of the self evaluation forms and team meeting reports allows the instructors to monitor the group dynamics and provide most effective support when needed. It also ensures you are not tempted to skip the procedure :)

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WSE 324 Renewable Materials Laboratory: Structured Team Work Guide Attachments
ATTACHMENT #5

The following pages are reproduced by permission from Dr. Peter S. Saunder’s Collaborative Learning Workshop Handbook issued by the OSU Center for Teaching and Learning.
This page describes team member roles in structured teamwork and in collaborative learning activities. Most of the lab activities in this course will be performed in groups. At first it may feel clumsy and artificial, but with some practice you should begin seeing how the role assignment improves the productivity of the team. Any team.

This may be practiced in any task group (ad-hoc or long-term) in and outside the classroom.

**Team Roles for Cooperative Learning Activities**

**Captain**

1. Keep the process enjoyable and rewarding for team members.
2. Make sure each member has a role and is performing within that role.
3. Ensure that all team members can articulate what has been learned.
4. Manage time, stress and conflict.
5. Control the process and its pacing; keep members focused.
6. Contribute to the group and actively learn.
7. Maintain accountability for the overall performance of the team.

**Reflector**

1. Observe performance, interactions and the dynamics among team members.
2. Be a good listener and observer.
3. Analyze and record strengths, improvements and insights into a "Reflector's Journal".
5. Report from the Reflector's journal, rephrasing assessments positively and constructively.
6. Intervene with observations about the process and suggest strategies for change.
7. Remind the team Captain of his or her duties.
8. Contribute to the group and actively learn.

**Recorder**

1. Record group roles and instructions at the beginning of a task or activity.
2. Document legibly and accurately group decisions and discoveries in a Recorder's journal or "learning journal.
4. Control information flow, articulate concepts in alternative forms if necessary.
5. Prepare a report that can be used for discussion purposes; integrate and synthesize when several ideas are presented.
6. Contribute to the group and actively learn.

**Spokesperson**

1. Speak for the team when called upon to do so.
2. Ask questions posed by the team, or request clarification.
3. Make oral presentations to the class for the team.
4. Use the Recorder's journal to share the team's discoveries and insights.
5. Collaborate periodically with the Recorder.
6. Contribute to the group and actively learn.
Optimist
1. Focus on why things will work.
2. Keep the team in a positive frame of mind.
3. Look for ways in which team discoveries can be applied or used to the team's advantage.
4. Contribute to the group and actively learn.

Skeptic
1. Question and check the assumptions that are being made.
2. Determine the issues or reasons why quality is not being met at the expected level.
3. Be constructive in helping the team improve performance.
4. Contribute to the group and actively learn.
The following description of group development dynamic is attributed to B.W. Tuckman of Naval Medical Research Institute in Bethesda, MD, but functions in the web in multiple adaptations to some specific disciplines.


5 Stages of Group Development

State 1: Forming
In the Forming stage, personal relations are characterized by dependence. Group members rely on safe, patterned behavior and look to the group leader for guidance and direction. Group members have a desire for acceptance by the group and a need to know that the group is safe. They set about gathering impressions and data about the similarities and differences among them and forming preferences for future sub-grouping. Rules of behavior seem to be to keep things simple and to avoid controversy. Serious topics and feelings are avoided. The major task functions also concern orientation. Members attempt to become oriented to the tasks as well as to one another. Discussion centers on defining the scope of the task, how to approach it, and similar concerns. To grow from this stage to the next, each member must relinquish the comfort of non-threatening topics and risk and the possibility of conflict.

Stage 2: Storming
The next stage, which Tuckman calls, Storming, is characterized by competition and conflict in the personal-relations dimension and organization in the task-functions dimension. As the group members attempt to organize for the task, conflict inevitably results in their personal relations. Individuals have to bend and mold their feelings, ideas, attitudes, and beliefs to suit the group organization. Because of "fear of exposure" or "fear of failure", there will be an increased desire for structural clarification and commitment. Although conflicts may not surface as group issues, they do exist. Questions will arise about who is going to be responsible for what, what the rules are, what the reward system is, and what criteria for evaluation are. These reflect conflicts over leadership, structure, power, and authority. There may be wide swings in members' behavior based on emerging issues of competition and hostilities. Because of the discomfort generated during this stage, some members may remain completely silent while others attempt to dominate. In order to progress to the next stage, group members must move from a "testing and proving" mentality to a problem-solving mentality. The most important trait in helping groups to move on to the next stage seems to be the ability to listen.

Stage 3: Norming
In Tuckman's Norming stage, interpersonal relations are characterized by cohesion. Group members are engaged in active acknowledgment of all members' contributions, community building and maintenance, and solving of group issues. Members are willing to change their preconceived ideas or opinions on the basis of facts presented by other members, and they actively ask questions of one another. Leadership is shared, and cliques dissolve. When members begin to know-and identify with-one another, the level of trust in their personal relations contributes to the development of group cohesion. It is during this stage of development (assuming the group gets
that people begin to experience a sense of group belonging and a feeling of relief as a result of resolving interpersonal conflicts.

The major task function of stage three is the flow between group members. They share feelings and ideas, solicit and give feedback to one another, and explore actions related to the task. Creativity is high. If the group members attain this stage of data flow and cohesion, their interactions are characterized by openness and sharing of information on both a personal and task level. They feel good about being part of an effective group.

The major drawback of the norming stage is that members may begin to fear the inevitable future breakup of the group; they may resist change of any sort.

Stage 4: Performing

All groups do not reach the Performing stage. If group members are able to evolve to stage four, their capacity, range, and depth of personal relations expand to true interdependence. In this stage, people can work independently, in subgroups, or as a total unit with equal facility. Their roles and authorities dynamically adjust to the changing needs of the group and individuals. Stage four is marked by interdependence in personal relations and problem solving in the realm of task functions. By now, the group should be most productive. Individual members have become self-assuring, and the need for group approval is past. Members are both highly task-oriented and highly people-oriented. There is unity: group identity is complete, group morale is high, and group loyalty is intense. The task function becomes genuine problem solving, leading toward optimal solutions and optimum group development. There is support for experimentation in solving problems and an emphasis on achievement. The overall goal is productivity through problem solving and work.

Stage 5: Adjourning

Tuckman's final stage, Adjourning, involves the termination of task behaviors and disengagement from relationships. A planned conclusion usually includes recognition for participation and achievement and an opportunity for members to say personal good-byes. Concluding a group can create some apprehension—in effect, a minor crisis. The termination of the group is a regressive movement from giving up control to giving up inclusion. The most effective interventions in this stage are those that facilitate task termination and the disengagement process.
Positive and negative roles in groups

Positive roles in groups

Positive roles that help the group achieve its task.

- **Seeking information and opinions**: Asking questions, identifying gaps in the group's knowledge
- **Giving information and opinions**: Answering questions, providing relevant information
- **Summarizing**: Restating major points, pulling ideas together, summarizing decisions
- **Evaluating**: Comparing group decisions and work to standards and goals
- **Coordinating**: Planning work, giving directions, and fitting together contributions of group members.

Positive roles that help the group build loyalty, resolve conflicts and function smoothly.

- **Encouraging participation**: Demonstrating openness and acceptance, recognizing the contributions of members, calling on quieter group members
- **Relieving tensions**: Joking and suggesting breaks and fun activities
- **Checking feelings**: Asking members how they feel about group activities and sharing one's own feelings with others
- **Solving interpersonal problems**: Opening discussions of interpersonal problems and suggesting ways to solve them
- **Listening actively**: Showing group members that they have been heard and that their ideas are being taken seriously
Negative Roles in a Group:

- **Hogging the show**: Talking too much, too long and too loud
- **Problem solver**: Continually giving the answer or solution before others have had much chance to contribute
- **Speaking in capital letters**: Giving one's own solutions or opinions as the final work on the subject often aggravated by tone of voice and body posture
- **Defensiveness**: Responding to every contrary opinion as though it were a personal attack
- **Nit-picking**: Pointing out minor flaws in statements of others and stating the exception to every generality
- **Restating**: Especially what has just been said by a non-dominant person
- **Attention seeking**: Using all sorts of dramatics to get the spotlight
- **Task and content focus**: To the exclusion of nurturing individuals or the group through attention to process the form
- **Put-down and one-upmanship**: "I used to believe that, but now" or "How can you possibly say that?"
- **Negativism**: Finding something wrong or problematical in everything
- **Focus transfer**: Transferring the focus of the discussion to one's own pet raps
- **Residual office holder**: Hanging on to formal powerful positions
- **Self-listening**: Formulating a response after the first few sentences, not listening to anything from that point on but leaping in at the first pause
- **Inflexibility and dogmatism**: Taking a last stand for one's position on even minor items
- **Avoiding feelings**: Intellectualizing, withdrawing into passivity or making jokes when it's time to share personal feelings
- **Condescension and paternalism**: "Now, do any women have anything to say?"
- **Being "on the make"**: Using sexuality to manipulate people
  
  *Seeking attention and support from women while competing with men*
- **Running the show**: Continually taking charge of task before others have a chance to volunteer
- **Pack-ratites**: Protectively storing key group information for one's own use and benefit
- **Speaking for others**: "A lot of us think that we should ...." or "What so-and-so really meant was ...."

The full wealth of knowledge and skill is severely limited by such behaviors. Women and men who don't feel comfortable participating in a competitive atmosphere are, in effect, cut off from the interchange of experience and ideas.