

Engin 103
February 2, 2010

[back to e-syllabus](#)

Topics:

[Brainstorming Example: Phases 3-4-5](#)

[Teamwork: A Case Study](#)

[More on Teamwork and Presentations](#)

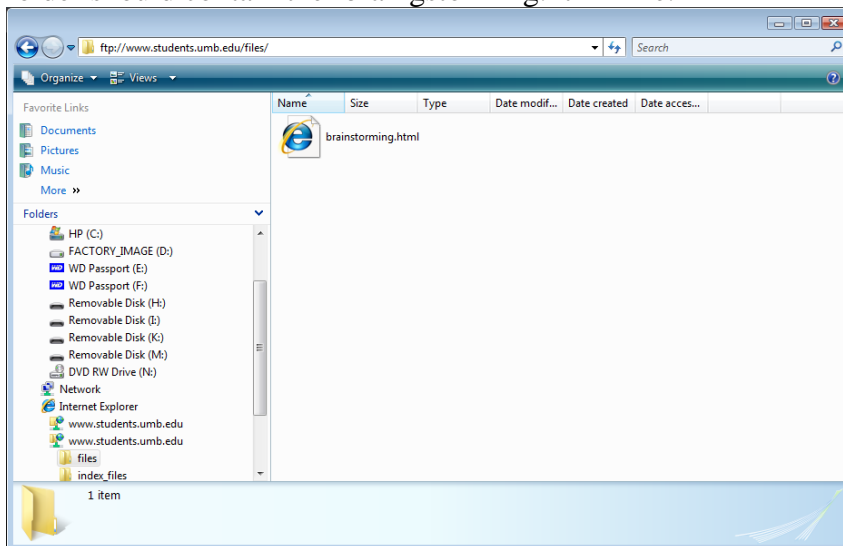
[Logbook questions](#)

Brainstorming: helps generate and filter ideas for a new project.

A Brainstorming Example: Leadership skills

Phase 1

Team leader: please copy this entire file into a Word file, then use Save As/ Web page (*.htm,*.html) to save it as 'brainstorming.html' (you should include the extension '.html'!) into a flash drive or a temporary folder in the hard drive. After having your team discuss the Phase 1 question below, record the answer into the appropriate row. Save and close the file, **then upload it onto the 'files' folder in the server** via <ftp://www.students.umb.edu> using the login information provided for your team. Create the **files** folder in the server window if it is not there. After uploading, the **files** folder should contain the 'brainstorming.html' file.



What is one skill that you can develop to be a good team leader?

Team #		One skill for a good team leader	
Section 1	Section 2	Section 1	Section 2
<u>1</u>	<u>1</u>	Communication	
<u>2</u>	<u>2</u>	Dependability	
<u>3</u>	<u>3</u>	Confidence	
<u>4</u>	<u>4</u>	Confidence	
<u>5</u>	<u>5</u>	Creative	
<u>6</u>	<u>6</u>	Preparation	
<u>7</u>	<u>7</u>	Inspiring	
<u>8</u>	<u>8</u>	Multitasking	
<u>9</u>	<u>9</u>	Multitasking	
<u>10</u>	<u>10</u>	Organization	

Phase 2

Team leader: please update the file you uploaded in the previous Phase. After having your team discuss the Phase 2 question below, record the answer into the appropriate row in this table. Save and close the file, then upload it onto the 'files' folder in the server via <ftp://www.students.umb.edu> using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

What is one new skill that has not been entered in the previous Phase?

Team #		One skill for a good team leader, that has not been pointed out by any team in Phase 1	
Section 1	Section 2	Section 1	Section 2
<u>1</u>	<u>1</u>	Sufficient/efficiency	
<u>2</u>	<u>2</u>	Hardworking	
<u>3</u>	<u>3</u>	Consideration	
<u>4</u>	<u>4</u>	Initiative	
<u>5</u>	<u>5</u>	Initiative	
<u>6</u>	<u>6</u>	Responsible	
<u>7</u>	<u>7</u>	Consistency	
<u>8</u>	<u>8</u>	Delegating work	
<u>9</u>	<u>9</u>	Cooperative	
<u>10</u>	<u>10</u>	Adaptability	

Phase 3

Team leader: please update the file you uploaded in the previous Phase. After working with your team to eliminate repeated skills and to group related skills, record the different groups into different rows in the table below. Save and close the file, then upload it onto the 'files' folder in the server via <ftp://www.students.umb.edu> using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

Sorting: eliminating repeated skills and grouping related skills together

An example

Phase 1
Communication
Management
Delegation
To have good communication and fairness
People management
Hard-working and organized
Organization
Punctuality
Communication skills.

Phase 2
Accuracy
Attention to detail
Decisive
Initiative
Initiative
Confidence
Willing to do what is asked of them.
Confidence
Charisma

Phase 3 (Grouping: entries that are closely related should go to a same group)

Communication	Fairness Management Delegation Organization	Hard-working Punctuality	Accuracy Attention to detail Decisive Confidence	Initiative Willingness	Charisma	
---------------	--	-----------------------------	---	---------------------------	----------	--

Phase 4

Team leader: please update the file you uploaded in the previous Phase. After working with your team to define 5 distinctive categories and place previous-phase groups into these categories, record the 5 categories into different rows in the table below. Save and close the file, then upload it onto the 'files' folder in the server via <ftp://www.students.umb.edu> using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

Further sorting: defining five distinctive categories and place previous-phase groups into these categories

Example

Phase 4 (Making 5 Big Categories: Naming Each Group)

Communication	Management	Exemplary Qualities	Character	Experience		
Communication	Delegation Organization Fairness	Hard-working Punctuality Accuracy Attention to detail Willingness	Decisive Confidence Initiative Charisma	Knowledge Judgment		

Naming each group led to 4 big categories and some reorganization. This also prompted us to introduce a brand new category totally unrelated to the previous ones: Experience. As one progresses through the phases of a brainstorming process, additional thinking is required but the quality of discovered information is also increased.

Phase 5

Team leader: please update the file you uploaded in the previous Phase. After having your team discuss the question below, record the answer into the appropriate row in this table. Save and close the file, then upload it onto the 'files' folder in the server via <ftp://www.students.umb.edu> using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

What of the previous-phase categories is the most important?

Section 1			
-----------	--	--	--

Section 2			
-----------	--	--	--

[back](#)

Engin 103

Engin 103

Teamwork -Case Study #1

Engin 103 **team 12** consists of 4 members: A, B, C, D. During Project 0 A acted as the team's leader, he sent out an email regarding the project, only B replied so he thought C and D are not interested in participating, he scheduled meetings with B and they both completed part I of Project 0. During Part I presentations, A and B performed the PowerPoint presentation, while C and D did not participate since they felt they did not contribute to the project being presented.

C and D wanted to change the team, they said they felt left out, were not given a chance to participate in the project. The instructor encouraged the members to try to work together and give it a second chance. In Project 1 member C tried to be more responsive to the team leader, B, and participated as much as possible in the team meetings. At one point D was told to build a part, which will be connected to the team device, for Project 1 presentation. D asked if the team could finish their part then give it to him, he will build his part and connect to the whole system. He asked to have it by 1pm on a Wednesday before the presentation. The team did not think they could have it by that time, also they thought D did not need their part to complete his part, they never communicated their decision back to D. D traveled to the meeting place and waited for an hour on Wednesday afternoon to get the team system, nobody showed up. B, A, C completed the project on their own the night before the presentation, and gave D a poor grade for his participation.

The team improved slightly when C became the leader. However when Project 2 was completed, A, B, C wanted to change the team, they were afraid D would "revenge" by giving them a poor performance grade when he will be the leader for Project 3. D maintained he will promote participation after a meeting with the instructor. Five minutes before the presentation, A and B were still skeptical on D's promises, and since he did not show up yet, they were afraid their grades will be affected because D will not deliver as 'he did not in the previous projects', they thought. However D showed up on time and delivered the presentation using inputs from all members of the team.

Team leaders: Take a look at the Elements of Teamwork Checklist below, discuss with your team to select which **one** element would have helped **Team 12** the most, type in the corresponding box below, save the file as “teamwork1.html”, then upload it to the team’s “files” folder in the server via <ftp://www.student.umb.edu>

Team #		Case Study #1 Teamwork element	
Section 1	Section 2	Section 1	Section 2
<u>1</u>	<u>1</u>		
<u>2</u>	<u>2</u>		
<u>3</u>	<u>3</u>		
<u>4</u>	<u>4</u>		
<u>5</u>	<u>5</u>		
<u>6</u>	<u>6</u>		
<u>7</u>	<u>7</u>		
<u>8</u>	<u>8</u>		
<u>9</u>	<u>9</u>		
<u>10</u>	<u>10</u>		

Two-way communication is very important

Teamwork -Case Study #2

Engin 103 team 13 consists of 3 members: A, B, and C. The team met and worked on Project 0, everyone did a little bit on their part. When the presentation is due, the member who has the PowerPoint presentation is missing.

Team leaders: Take a look at the Elements of Teamwork Checklist below, discuss with your team to select which **one** element would have helped **Team 13** the most, type in the corresponding box below, save the file, then upload it to the team’s “files” folder in the server via <ftp://www.student.umb.edu>

Team #		Case Study #2 Teamwork element	
Section 1	Section 2	Section 1	Section 2
<u>1</u>	<u>1</u>		
<u>2</u>	<u>2</u>		
<u>3</u>	<u>3</u>		
<u>4</u>	<u>4</u>		
<u>5</u>	<u>5</u>		
<u>6</u>	<u>6</u>		
<u>7</u>	<u>7</u>		
<u>8</u>	<u>8</u>		
<u>9</u>	<u>9</u>		
<u>10</u>	<u>10</u>		

A procedure is needed in case of emergencies

Elements of Teamwork Checklist

By Joanne Fortuin, Northern Alberta Institute of Technology, Alberta, Canada

COMMUNICATION

✚ Excellent: Free, open expression of ideas and feelings at the right times with no fear of embarrassment or reprisal.

✚ Poor: Stifled, close to the vest, guarded. Lets the other person start the communication.

PARTICIPATION

✚ Excellent: Full Contribution, reaches out to lend a hand, readily available.

✚ Poor: Lack of initiative to help the other person? not around when needed, begrudging contribution.

GIVE AND TAKE

✚ Excellent: Open to compromise, flexible? Recognition that it is sometimes better to give in than be "right".

✚ Poor: Stubbornly dug in on own viewpoint, uncompromising, always right, never wrong.

LEADERSHIP

✚ Excellent: Promotes team actions and decisions, recognizes he/she needs the team, and lets each member know where they stand. Team members support his/her suggestions.

✚ Poor: No leadership initiated. Reacts rather than acts. Poor or reluctant support of ideas.

ORGANIZATION

✚ Excellent: Knows their responsibilities. Provides structure to accomplish team goals.

✚ Poor: Unclear of responsibilities or doesn't care about responsibilities.

PREPARATION

✚ Excellent: Did their homework. Research was thorough, especially as it affects other team members.

✚ Poor: Team progress was held up because of participant's lack of preparation. Consistently dropped the ball.

PROCEDURE

✚ Excellent: Lives by the ground rules and procedures. Functions smoothly, works with the team.

✚ Poor: Absence of order, operates on their own rules, progresses from crisis to crisis.

CAPABILITY

✚ Excellent: Members have confidence in participant and can rely on performance.

✚ Poor: Mediocre "Class C" player not interested in becoming "Class A".

COMMITMENT

Excellent: Participant rallies to the goals. Goals clearly defined in his/her mind.

Poor: Lack of awareness of, or resistance to, team goals.

PROGRESS

- ✚ Excellent: An attitude of action and momentum, makes suggestions of steps forward.
- ✚ Poor: Dead in the water ? "Everything is a drag" attitude.

[back](#)

More on Teamwork and Presentations

Please post a question in Google Groups if you are unsure about the right answer for each of the Logbook questions shown below.

[back](#)

LOGBOOK: [example of a logbook page](#)

- Use a quadrille notebook; number all pages; date all entries
- Write your notes for all activities, thoughts, problems and solutions, and learning conclusions related to Engin 103. You should write down progress, outcomes, and conclusions on projects and teamwork; conclusions from class work (including LabVIEW) and homework.
- In addition you should answer in the logbook all questions listed in these notes in blue, as shown below:

3)

(a) Which of the five categories of leadership skills summarized in Phase #4 of the brainstorming process is the most basic and important (in such a way that when the other four are absent, it will well help a team leader in Engin 103)? Explain your position in your own words.

(b) Explain what leadership skills would have helped team 12 and team 13 in the Case Study #1 and #2 above, support your claim with reasons and by referring to specific circumstances in the Case Studies.

4) (a)

Teamwork: for each question below select which option is right for a good teamwork, A or B?

Q#	A	B
1	Additive	Complementary
2	Reserved	Open
3	Independent	Interdependent

4	Inquisitive	Defensive
5	Complacent	Discontent
6	Persevering	Impatient
7	Unable	Unequal
8	Different	Uniform
9	Procedural	As we go

(b)

Presentations: for each question below select which option is best for a good presentation, A or B?

Q#	A	B
1	Expert audience	Inexpert audience
2	Know details, wait for questions	Present all details
3	Read from slides	Talk using flash cards
4	Explain connections between things	Point to an equation for the connections
5	Show a graph	Explain tendencies in the graph
6	Plan on using 100% allotted time	Plans for 100%, 90%, 80% or 70% of allotted time
7	Large fonts, uniform background	Small fonts, rich background
8	Only presentation matters	Presentation and presenters are both important
9	Speaking too loud bothers	Speaking too soft bothers
10	Clear oral presentation	Clear oral presentation with slides

[back](#)