

FACULTY OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

UNIVERSITI PUTRA MALAYSIA

INDUSTRIAL TRAINING GUIDE

4th Edition (2022)

INDUSTRIAL TRAINING AND CAREER UNIT (ITCU) Updated: September 2022

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1.0 INTRODUCTION

The Faculty of Computer Science and Information Technology was established on 1st of October 1998 with four departments. They are the Department of Computer Science (CS), Department of Multimedia (MM), Department of Communication Technology and Network (CTN), and Department of Software Engineering and Information Systems (SEIS).

Each department offers the following programs:

- Bachelor of Computer Science (CS)
- Bachelor of Computer Science (MM)
- Bachelor of Computer Science (CTN)
- Bachelor of Software Engineering (SEIS)

The ITCU was established on the 28th of July 2009 to manage and handle the Industrial Training course at the faculty level.

2.0 INDUSTRIAL TRAINING

It is compulsory for students to undergo the Industrial Training course for a duration of at least 24 weeks at any suitable organization, relevant to the discipline of Computer Science and/or Information and Communication Technology.

It is also compulsory for students to adhere to the curriculum outlined in the Industrial Training handbook in order to pass the course. Briefly, the curriculum, based on the respective specializations, are as follows:

- 2.1 Bachelor of Computer Science (Computer Systems) Students from this program must register for the SSK4901 course (Prerequisites: SSE3001 and SSK3408, or with Department approval)
- 2.2 Bachelor of Computer Science (Multimedia) Students from this program must register for the SKM4901 course (Prerequisite: SKM3300, or with Department approval)
- 2.3 Bachelor of Computer Science (Computer Network) Students from this program must register for the SKR4901 course (Prerequisite: SKR3504, or with Department approval)

2.4 Bachelor of Software Engineering

Students from this program must register for the **SSE4901** course (Prerequisite: SSE4300, **and** with Department approval.)

3.0 INDUSTRIAL TRAINING OBJECTIVE

The objective of the Industrial Training course is to expose students to the real world working environment, within the Information and Communication Technology industry. Students can choose to be placed in private /governmental organizations, or statutory bodies. The duration of the training is 24-weeks where during this time; students are expected to apply the relevant theories and knowledge learnt during their studies to accomplish tasks assigned by the organization.

Through the Industrial Training exposure, it is hoped that students will be able to familiarize themselves and eventually be accustomed to the real-world ICT working environment. Other goals that would hopefully be achieved are:

- Increase knowledge
- Improve practical skills
- Understand the nature of ICT tasks
- Acquire and develop self-confidence
- Understand organizational roles within the workplace

Course Learning Outcome

At the end of this course, students are able to:

- 1. Critically accomplish tasks at the workplace (C5, CTPS)
- Apply theoretical and practical aspects learnt during the Industrial Training (P5)
- 3. Display commitment, ethics, and professionalism (A4, EM)
- 4. Display effective verbal and written communication with various stakeholders (CS, TS)

4.0 INDUSTRIAL TRAINING PROCESS

The following flowchart shows the overall process flow of the Industrial Training program:



4.1 THE APPLICATION PROCESS

COURSE REGISTRATION AND INDUSTRIAL TRAINING BRIEFING SESSIONS:

- Students fulfilling the course prerequisites are required to register for the Industrial Training Course based on their respective department code (as per Section 2.0). This must be done through the university's eSMP system at <u>http://esmp.upm.edu.my</u> once the semester begins.
- II. In the semester prior to commencing industrial training, the ITCU will conduct an initial briefing for students, which will be held no later than the **10th week of the semester**.
- III. Another (final) briefing session will be held, no later than the **15**th week of the semester.

THE INDUSTRIAL TRAINING & CAREER MANAGEMENT SYSTEM:

 Students are required to use the Industrial Training and Career Management System (LI system) at <u>http://licsit.upm.edu.my/</u> in order to apply for internship placements. Login details are the same as the student's Putra ID. Several scenarios pertaining to applications are presented in **Table 1**.

TABLE 1: APPLICATION SCENARIOS AND ACTIONS TO BE TAKEN

ltem	Scenario	Action
1.	Offered a place by one of the five organizations	 i. Accept the offer and update the application status of the offering organization to Accepted in the LI system. ii. Once one company is accepted, the others will automatically be Rejected.
2.	Offered a place by more than one organization at the same time	 i. Accept the offer only from ONE organization. ii. Update the acceptance status into the LI system. iii. Once an offer is accepted, the other applications will automatically be Rejected.
3.	None of the organizations offers placement after 2 weeks from the date of application	 Apply to another organizations (up to five choices). No need to cancel existing applications.
4.	Organization offers some form of <u>conditional acceptance</u> , which might mean students must undergo a test and/or interview session (or sessions)	 i. In the event the student proceeds, please adhere to the organization's request for a test and/or interview. ii. Do not cancel other applications yet. Wait until the test/interview session(s) end. a. If offered a placement and student accepts: Do the same as Scenario 1 b. If offered a placement and student declines: Change the application status of the respective organization to Rejected. Apply to another organization.
5.	Applying to an organization not listed in the industrial training unit's database	 i. This application is only considered upon approval by the ITCU. Students need to make sure that the proposed organization is not blacklisted in the system. ii. Prior to applying the student must consult with the respective department coordinator. The following information must be submitted. a. Organization name b. Organization address

		iii.	 d. Organization's profile (format PDF, PPT, etc) – if available e. Job scope The ITCU will evaluate the application. a. In the case of approval, the organization details will be added into the database, and the student can proceed to apply for a placement via the system. b. In the case of rejection, the organization will not be included in the database.
6	Student fails to secure any industrial training placement by the due date	i.	If no offer(s) has been accepted within 3 to 4 weeks before the internship starting date the student must inform the ITCU.
7	Organizations that handle internship applications through a dedicated website or service.	i. ii.	 In some cases, organizations require applicants to send their applications through a dedicated website (e.g. Petronas). Others rely on services such as jobstreet.com etc. to handle the application process. Students needs to; Apply through the organization dedicated website, AND Apply through the LI system

- II. Two important steps that **must be performed** prior to any application:
 - a. **Resume**: Complete your resume in the LI system by providing the necessary input.
 - b. Academic Transcript: A certified copy of the student's academic transcript (from 1st semester until current result) must be uploaded into the system (*in PDF format*).This is to show proof that prerequisite courses have been fulfilled.

III. IMPORTANT POINTS:

- a. Applications made through the LI system will automatically generate an email that is sent to the organization (*cc to the student and his/her respective department coordinator*), which includes the following file attachments:
 - (i) a cover letter automatically generated by the LI system,
 - (ii) a copy of the student's resume,
 - (iii) copies of the student's **certified** academic transcripts, and

- (iv) a document outlining and explaining the approved tasks that students should undertake during the training period.
- b. In <u>special cases</u>, the email (with the document attachments) will not be sent to the respective organizations. Students must pay close attention to the email they receive postapplication through the system. Some organizations handle applications through a dedicated website (such as their own industrial training/internship website) or through services such as jobstreet.com. For such organizations, no email will be sent to the organization itself. It is therefore the student's responsibility to perform the application through the organization's dedicated website or service.

IV. UPON ACCEPTANCE:

- a. Students are required to update their application status to **Accepted**. Upon the updated status, the remaining organizations' status will be accordingly changed to **Rejected**. The ITCU will be informed through the LI system that the student has been accepted by the offering organization.
- b. The ITCU will handle all necessary communications and correspondences with the organization.

4.2 RESPONSIBILITIES OF THE INDUSTRIAL TRAINEE

Once accepted into an organization, the student now becomes an industrial trainee (henceforth referred to as the 'trainee').

GENERAL RULES:

- I. The official **begin** and **end** internship dates will be included in the <u>application letter</u> sent to the respective organizations. These dates are based on the commencement date of the current semester in which the industrial training course is offered.
 - a. The trainee will report for duty at the organization (*or virtually in the case of emergencies*) on the date and time agreed upon by the industrial training unit and the organization, which will be within the **begin** and **end** internship dates¹.
- II. It is compulsory for the trainee to undergo **24-weeks** of training at the organization. During the training:

¹ In special cases, the trainee is allowed to begin their training earlier than scheduled, provided all final examinations of the previous semester have been completed.

- a. The trainee is not allowed to take any form of leave (including sick leave), except those authorized by the organization; or leaves due to state/national public holidays. If any unauthorized leave is taken, the trainee must replace the number of days equal to the number of leave days taken.
- b. Any expenses during the training period, including (but not limited to) food, transportation, and accommodations, must be borne by the trainee him/herself.
- c. The trainee will maintain discipline and enthusiasm while refraining from any form of misconduct, to maintain the good name of the trainee's faculty and university².
- III. IMPORTANT NOTE: It is the responsibility of the trainee to report any discrepancies/abnormalities during the industrial training. If the trainee suspects that he/she is assigned (or will be assigned, for an extended duration) tasks, that are not in line with the requirements of the ITCU, please contact the respective department coordinator and/or the ITCU.
 - a. In the case where the organization is at fault, quick action must be taken by the trainee to
 - (i) report to the visiting lecturer
 - (ii) wait for the advice from the ITCU.
 - b. The ITCU will immediately investigate the matter and will advise the trainee accordingly.

(i) If the investigation results indicate the company/organization is at fault, the trainee is required to search for another internship placement immediately. The duration already spent at the initial company/organization will be counted as part of the overall internship duration

(ii) If the investigation results indicate the company/organization is not at fault, the trainee is required to continue their training at the company/organization.

² The trainee will be penalized if he/she does not comply with university rules and if they do not complete the training satisfactorily.

LOG BOOK AND INDUSTRIAL TRAINING REPORT:

- I. The trainee must fill in their **weekly log book** provided in the LI system. Entries must include general and/or specific details of tasks being performed during the training duration.
- II. The trainee must obtain weekly endorsements for the log book entries from his/her industrial supervisor. If endorsements are not obtained for four consecutive weeks, the trainee will no longer be able to insert any new entries into the log book. Entry previllages will only be restored when all necessary endorsements have been completed.
- III. Towards the end of the training period, the log book will be assessed by a visiting lecturer (appointed by the ITCU).
- IV. The trainee is also required to prepare his/her **Final Report**, which will be submitted to
 - (i) the ITCU, and
 - (ii) the appointed visiting lecturer.

5.0 VISITATIONS BY THE VISITING LECTURER

Two visitations will be performed by an appointed visiting lecturer (VL). The VL will be one of the academic staff from the trainee's department.

5.1 INITIAL VISIT

The initial visit will be performed between **Second** and **Fourth Week** from the data of training commencement. The trainee is required to prepare a short presentation outlining his/her tasks (or expected tasks). Preferably, trainees should also prepare a Gantt-chart when possible. Visitations are normally on-site (physical), however, virtual visits can be arranged in times of emergency (e.g. during the Covid-19 pandemic).

The industrial supervisor (SV) is also expected to be present during the initial visit to allow the VL to engage with him/her to foster good relations. This also allows the VL to obtain firsthand information with regards to the tasks that the trainee will perform.

5.2 FINAL VISIT

The final visit will be performed between the **TWENTY SECOND** and **TWENTY FOURTH** week of the training. During this visit, the trainee is expected to prepare a detailed presentation of what he/she has done during the entire industrial training. Like the initial visit, the SV will also be present.

6.0 ROLES AND RESPONSIBILITIES

6.1 ROLE OF STUDENT

Students should be aware of their roles throughout the industrial training course. All correspondences can be addressed to ITCU at fsktm.itcs@upm.edu.my and please also CC to your respective department coordinator.

Before commencing the industrial training, students are required to:

- I. Attend **BOTH** briefing sessions (as per Section 4.1) organized by the ITCU.
- II. Collect the **Certificate of Insurance Coverage** (issued by the Division of Student Affairs BHEP, UPM)
- III. Obtain a Letter of Indemnity (in some cases, this letter is required on both sides, i.e. the organization students are assigned to and from UPM).
- IV. Signing of a Non-Disclosure Agreement (NDA) if required.

After commencing training:

- I. Trainees are **not allowed** to withdraw from the training without prior notice to the ITCU (while providing strong justification). In the case the trainee needs to withdraw from the internship, he/she needs to immediately inform the ITCU. Please note that withdrawals are only allowed provided strong and valid justification. If the justification is valid, the trainee needs to send a withdrawal letter (approved by the ITCU) to the respective company/organization.
- II. Report for duty at the organization based on the appointed date and time.
- III. Fill in the **Industrial Training Report for Duty Confirmation Form** (email the complete form to fsktm.itcs@upm.edu.my) and it is returned within **1-week** from training commencement.
- IV. Submit a copy of **offer letter** from the organization (softcopy or hardcopy is accepted) to ITCU.
- V. Always comply with the **Universities and University Colleges Act** (AUKU) during the training period.
- VI. Input entries into the **weekly log book** via the LI system.
- VII. Between **Week-22** and **24**, the trainee must prepare for the final visitation by the VL.

Upon Training Completion:

- I. Submit the softcopy of the Industrial Training **Final Report.** Upload to the LI system.
- II. A hardcopy of the final report must be physically sent to the ITCU.

- III. Have completed all log book entries in the LI system (and duly endorsed by the industrial supervisor).
- IV. Have completed (through the LI system) the **Organization Evaluation by Student** form.
- V. Will remind the industrial supervisor to complete (through the LI system) the **Performance Evaluation by Industry Supervisor** form.

6.2 ROLE OF VISITING LECTURER

- Ensure proper implementation of the Industrial Training procedures by the student.
- Attempt to establish bilateral relations with the companies/organizations during the initial and/or final visits.
- Monitor and perform the following evaluations/assessments (in the LI System at http://licsit.upm.edu.my/, within the stipulated period:
- Upload signature/initial and official stamp to the system.
 - i. Initial Monitoring between the second and fourth week the training period. Fill up the pre evaluation form in the system.
 - ii. Final Monitoring within the twenty-second and twenty-fourth week of the training period. Fill up the final evaluation form in the system.
 - iii. Submit the hardcopy of the summary evaluation report to the respective department Industrial Training coordinator for approval.
- Submit the students' Industrial Training Log Book and Final Reports to the ITCU, Administration Office, Block A, FSKTM.

6.3 ROLE OF INDUSTRIAL TRAINING AND CAREER UNIT (ITCU)

- Appoint department level Industrial Training Coordinators.
- Conduct initial briefing to potential visiting lecturers and students, not later than the 10th week of the semester.
- Ensure suitability and validity of companies/organization in the Industrial Training company/organization database.
- Ensure all registered students obtain Industrial Training placement.
- Select and appoint visiting lecturers to respective companies/organizations.
- Perform necessary follow up actions with regards to Industrial Training activities in the case that any of the activities are at the detriment of the country, university, faculty, department and/or students.

6.4 ROLE OF INDUSTRIAL TRAINING COMPANY/ORGANIZATION

- Provide training relevant to the scope and schedule of Computer Science/Information and Communication Technology students.
- Provide briefing and information with regards to the rules and regulations of the company/organization that the students must adhere to.
- Appoint at least **one** qualified Industrial Training Supervisor for the student.

- Submit reports using the forms provided in the LI System (accessed via http://licsit.upm.edu.my/ using the *username* and *password* provided by the visiting lecturer during the final visit).
- Inform the ITCU if the student is involved in activities deemed unworthy that can tarnish the company's/organization's, university's and/or country's good name and reputation.

7.0 EVALUATION

The performance evaluation for students undergoing Industrial Training must be in accordance with the following criteria (refer to the evaluation rubrics in Appendix A1 and A3):

7.1	Evaluation by the Visiting Lecturer	(20%)
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7.1.1 Visiting Lecturer's Report (10%)

Evaluation criteria: Student's communication skills and progress presentation during the final visit.

7.1.2 Log Book (5%)

Evaluation criteria: Student's ability to record details with regards to tasks, activities and deliverables in the Log Book.

7.1.3 Attendance (5%)

Evaluation criteria: Attendance percentage that is reported by the Industrial Training Supervisor.

The **Daily Attendance** (can be downloaded from the LI System @ http://licsit.upm.edu.my/ must be attached on the **second page** of the Log Book.

7.2 Industrial Supervisor Report (40%)

Assessment by the Industrial Supervisor will be based on the following skills: (i) cognitive, (ii) critical thinking, (iii) problem solving, (iv) psychomotor, (v) affective, (vi) ethics and moralily, (vii) leadership and communication.

7.3 Student Industrial Training Final Report (40%)

Students' reports will be assessed by the visiting lecturer based on the following skills: (i) cognitive, (ii) critical thinking, (iii) problem solving, and (iv) psychomotor.

8.0 STUDENT'S FINAL REPORT

The report must contain the following items:

8.1 Content

- The Introduction section should include:
 - I. The objectives of the Industrial Training course; and
 - II. A brief summary of what has been done and achieved during the training period.
- Company/Organization background.
 - I. The company's/organization's profile, mission and vision; and
 - II. The organizational chart, with relevant descriptions.
- Tasks performed/system developed/etc.
 - I. A detailed explanation of the tasks performed by month or by stages; and
 - II. The processes, activities and outcomes for each task.
- Conclusions and recommendations.
 - I. Describe all lessons learnt, experiences, new knowledge and skills acquired during the training; and
 - II. Summarize the Industrial Training program and provide suggestions for future improvements.

8.2 The Report

- A4 paper size
- Printed and ring/comb binded
- Arial 12pt, 1.5 spacing, justified.
- Contain a minimum of 10,000 words
- All pages must be numbered (center alignment)
- Language: English.
- Must attach the **Approval Sheet** on the **first page** of the report. (Download from the LI System @ http://licsit.upm.edu.my/).

9.0 ALLOWANCE

Remuneration or allowances for the students are subject to the company/organization that offers placement for Industrial Training.

• It is worth noting that normally, government or government-linked organizations do not provide allowances.

10.0 APPENDICES

Appendix 1

VISITING LECTURER RUBRIC

RUBRIC FOR ASSESSMENT OF STUDENT'S PERFORMANCE BY VISITING LECTURER - 10%										
A	CRITERIA	VERY POOR (1)	POOR (2)	GOOD (3)	VERY GOOD (4)	EXCELLE NT (5)	MARKS (/5)			
Communication	(i) Communication skills	Very poor oral and written skills	Poor oral and written skills	Somewhat developed oral and written skills	Good oral and written skills	Excellent oral and written skills	/5			
	(ii) Progress presentation or report given by the students during the visit	Very poor organization of presentations with unclear main points and conclusions	Poor organization of presentatio ns with unclear main points and conclusions	Presentation reasonable organized but not always effective	Well organized presentations	Excellent presentation s and written documents Excellent and creative slides	/5			

ATTENDANCE RUBRIC – 5%											
В	CRITERIA	VERY POOR (1)	POOR (2)	GOOD (3)	VERY GOOD (4)	EXCELLENT (5)	MARKS (/5)				
Reflect social accountability	(i) Attendance during Industrial training	Student attendance is below 80%	Student attendance is within 80- 89%	Student attendance is above 90%	Student attendance is above 95%	Student attendance is 100%	/5				

LOG BOOK RUBRIC – 5%										
С	CRITERIA	VERY POOR (1)	POOR (2)	GOOD (3)	VERY GOOD (4)	EXCELLE NT (5)	MARKS (1-5)			
Log Book	Log Book: Shows an evident of attendance, provides complete log book record; expectation includes fulfillment of task, outcome, and supervisor's comments	Unable to demonstrate a sense of professionalism and work ethic with attendance evident of less than 80 percent without acceptable reason, and delivering outcome far from expectation	Able to demonstrate only slight professionalism and work ethic by providing an evident of at least 80-89 percent attendance, and delivering outcome below expectation	Able to demonstrate a sense of professionalism and work ethic by providing an evident of at least 90-94 percent attendance, and delivering outcome near expectation	Able to demonstrat e a strong sense of professiona lism and work ethic by providing an evident of at least 95-99 percent attendance, and delivering outcome as expected	Able to demonstrat e a strong sense of professiona lism and work ethic by providing an evident of 100 percent attendance, and delivering outcome that exceeds expectation	/5			

STUDENT REPORT RUBRIC – 40%										
D	CRITERIA	VERY POOR (1)	POOR (2)	GOOD (3)	VERY GOOD (4)	EXCELLENT (5)	MARKS /5			
Report Evaluati on	(i) Introduction (LI Objective)	Not clearly written	Written too short	Partly Written	Well written	Clearly written	/5			
	(ii) Organization Background (Company Profile, Organizational Chart with description)	Not clearly written	Written too short	Partly Written	Well written	Clearly written	/5			
	(iii) Task performed I. explain in detail the task performed by month or by stages II. For each task performed, provide the processes activities and outcomes	Not clearly written	Written too short	Partly Written	Well written	Clearly written	/5			
	(iv) Conclusion and Recommendat ion I. Describe all lesson learnt, experiences, new knowledge and skill acquired during industrial training II. Summarize the industrial training program and include suggestion for improvement	Not clearly written	Written too short	Partly Written	Well written	Clearly written	/5			
	(v) Report Format (Fully binded, report organization)	Not according to the format and content	Does not meet the required format and content	Partially follow the required format and content	Follow the required format and content	Completely follow the required format and content	/5			

	(vi) Use of language	Does not meet the academic writing standard	There are many language mistakes; difficulties in understanding the report	Most of the words used are unclear, incorrect and unsuitable which have an effect on the effectiveness of the report	Most of the words used are clear, correct and suitable except for few unsuitable words but does not impair the report	Uses of words are clear, correct and suitable represents an excellent level	/5
	(vii) Complete : report content requirement (i) Introduction (LI Objective) (ii) Organization Background (Company Profile, Organizational Chart with description) (iii) Task performed (Process, Activities and Outcome) (iv) Conclusion and Recommendat ion (Lesson learnt, experience, new knowledge and skill acquired, suggestion)	Does not meet the requiremen t set	Too much important requirement are left out	Only few important requirement are left out but is still not complete	All required important requirement are included, but some irrelevant information are also included	All required important requirement are included	/5
Commu nicate Effectiv ely	Quality of report Content - the content must be consistent and relevant	Content are inconsisten t and irrelevant	Incomprehensi ble and written in an informal nature	Effective communication written in consistent formal nature	Clear, organized, and at a level appropriate for intended readers/audie nce	Clear, comprehensibl e, organized, succinct and at a level appropriate for intended readers/audie nce	/5

Appendix 2

Rubric for Assessment of Student Performance by Industrial Supervisor (40%)									
	Criteria	Very Poor (1)	Poor (2)	Good (3)	Very Good (4)	Excellent (5)			
Question	A. Skills (Psychomoto	or)							
1	The ability to develop or apply information and communication technology (ICT) products by using tools, hardware or computer software.	Unable to construct products.	Products are developed, but only part of the specification and has an error	Products are completely developed according to specifications, but still have error does that not affect the output of the product.	Completely developed and meet all specifications.	Completely developed and meet all specifications including additional features.			
2	Ability to design or apply program / database / applications / network and others that related to ICT field.	Unable to design	Able to design but however with many mistakes	Able to design correctly with acceptable mistake	Able to design correctly and use proper elements	Able to design correctly, use proper elements and documentation			
3	Develop or apply program/scripting using appropriate tools.	Unable to construct program/script	Able to construct program/script but have logic error	Able to construct program/script correctly without any logic error	Able to construct program/ script correctly without any logic error and display appropriate output	Able to construct program/ script correctly without any logic error and display appropriate output. Adhering to programming/scripting best practice.			
3	Construct applications using tools/programming language for a wide spectrum of computer platforms	Incomplete application and unable to use the tool	Incomplete application but be able to use the tool	Complete and able to use the tool	Complete and able to use more than 1 tool	Complete, able to use more than 1 tool and manipulate the programming component of the tool			

INDUSTRIAL S UPERVISOR RUBRIC

Question B. Problem Solving and Communication

	g.					
4	Responsiveness	Reluctant to ask questions, becomes uneasy when asked questions	Asks some questions to aid understanding and learning, may become uneasy when asked questions	Asks questions relevant to understanding and learning, demonstrates poise when answering questions, but hesitates before doing so.	Ask insightful questions to help understanding and learning, demonstrates poise when answering questions	Ask challenging questions to help understanding and learning, demonstrates poise and confidence when answering questions
5	Listening	ls easily distracted	Pays attention to speaker	Demonstrates a listening attitude	Indicates signs of active listening	Actively listening with interest

C. Professionalism					
Effort and participation	Consistently inactive in activities during the lesson	Sometimes participate in activities during the lesson	Always participate in activities during the lesson	Actively participate in activities during the lesson	Proactively participate in activities during the lesson
	No effort made to assign roles to group members	Student assigned roles but roles not consistently adhered to	Students assigned a role but roles not clearly defined	Student assigned a clearly defined role; group members perform roles effectively	All students in the class enthusiastically participate
					Each students accepted the roles; group members are committed to the roles
Responsibility	Does not perform assigned tasks; often misses meetings and, when present, does not have anything constructive to say; relies on others to do the work	Perform assigned tasks but needs many reminder; attend meetings regularly but generally does not say anything constructive; sometimes expect others to do the work	Perform all assigned tasks; attend meetings regularly and usually participate effectively, generally reliable	Perform all assigned tasks effectively; attend meetings regularly and usually participate effectively, reliable	Perform all assigned tasks effectively; attend all meetings and proactive participation, very reliable
	C. Professionalism Effort and participation	C. ProfessionalismEffort and participationConsistently inactive in activities during the lessonNo effort made to assign roles to group membersNo effort made to assign roles to group membersProvide the image of the	C. ProfessionalismEffort and participationConsistently inactive in activities during the lessonSometimes participate in activities during the lessonNo effort made to assign roles to group membersStudent assigned roles but roles not consistently adhered toDoes not perform assigned tasks; often misses meetings and, when present, does not have anything constructive to say; relies on others to do the workPerform assigned tasks but needs many reminder; attend meetings regularly but generally does not say anything constructive; sometimes expect others to do the work	C. ProfessionalismEffort and participationConsistently inactive in activities during the lessonSometimes participate in activities during the lessonAlways participate in activities during the lessonNo effort made to assign roles to group membersStudent assigned roles but roles not consistently adhered toStudents assigned a role but roles not clearly definedResponsibilityDoes not perform assigned tasks; often misses meetings and, when present, does not have anything constructive to say; relies on others to do the workPerform all assigned tasks; assigned tasks; ensure anything constructive; sometimes expect others to do the workPerform all assigned tasks; ensure anything constructive; sometimes expect others to do the work	C. ProfessionalismEffort and participationConsistently inactive in activities during the lessonSometimes participate in activities during the lessonAlways participate in activities during the lessonActively participate in activities during the lessonActively participate the lessonStudent assigned tasks; offen misses regularly but generally does not say anything constructive to say; relies on others to do the workPerform all assigned tasks; attend meetings regularly and usually participate effectively, enerally reliablePerform all assigned tasks; effectively, ereally and usually participate effectively, enerally reliablePerform all assigned tasks; effectively, ereal actively effectively, ereal actively effectively, enerally reliable