

Field Experience Specifications

Course Title:	Co-op Training in Physics	
Course Code:	PHY4803	
Program:	Physics	
Department:	Physics	
College:	Applied Science	
Institution:	Umm Al-Qura University	











Table of Contents

A. Field Experience Identification	3	
B. Learning Outcomes, and Training and Assessment Methods	3	
1. Field Experience Learning Outcomes		3
2. Alignment of Learning Outcomes with Training and Assessment Methods/	/ Activities	3
3. Field Experience Learning Outcomes Assessment		4
C. Field Experience Administration	5	
1. Field Experience Locations		5
2. Supervisory Staff		5
3. Responsibilities		5
4. Field Experience Implementation		7
5. Safety and Risk Management		7
G. Training Quality Evaluation	8	
E. Specification Approval Data	8	

A. Field Experience Identification

- 1. Credit hours: 8 hours
- 2. Level/year at which this course is offered: level 9/3rd year
- 3. Dates and time allocation of field experience activities.
 - Number of weeks: (10) week
 - Number of days: (50) day
 - Number of hours: (300) hour
- 4. Prerequisites to join field experience (if any): Approval from the Department

B. Learning Outcomes, and Training and Assessment Methods

1. Field Experience Learning Outcomes

	CLOs	Aligned PLOs	
1	Knowledge and Understanding		
1.1	List the stages of the field training	K1	
1.2	Describe each stage using mathematics	K2	
1.3			
1			
2	Skills:	_	
2.1	Apply Physics law to calculate the physical quantity	S1	
2.2	Explain the scientific theoretical and empirical procedures in physics	S2	
2.3			
3	Values:		
3.1	Apply standards of integrity and ethics in all tasks	V1	
3.2	Collaborate and contribute responsibly and effectively in teamwork	V2	
3.3			
3			

2. Alignment of Learning Outcomes with Training Activities and Assessment Methods

Code	Learning Outcomes	Training Methods/Activities	Assessment Methods
1.0	Knowledge and Understanding		
1.1	List the stages of the field training	Training in the field	Barrier Control
1.2	Describe each stage using mathematics	Training in the field	Progress report, Final presentation
2.0	Skills		
2.1	Apply Physics law to calculate the physical quantity	Training in the field	Final report, The faculty advisor's
2.2	Explain the scientific theoretical and empirical procedures in physics	Training in the field	evaluation, Evaluation of field- experience committee
20.00			experience committee
3.0	Values	4117 4117 417	
3.1	Apply standards of integrity and ethics in all tasks	Training in the field	Progress report, Final report,

Code	Learning Outcomes	Training Methods/Activities	Assessment Methods
3.2	Collaborate and contribute responsibly and effectively in teamwork	Training in the field	Final presentation The faculty advisor's evaluation,
1909	-019-000		Evaluation of field- experience committee

3. Field Experience Learning Outcomes Assessment a. Students Assessment Timetable

#	Assessm ent task*	Assessment timing (Week)	Percentage of Total Assessment Score
1	Attendance and punctuality at the field location.	Weekly	10%
2	Preparing the plan or a proposal of work.	First week	4%
3	Dependability and reliability, ability for self- learning and search for information.	Weekly	10%
4	Maintaining effective relationships with co- workers.	Weekly	10%
5	Writing a weekly report on his progress.	Weekly	10%
б	Quality of work output.	Weekly	16%
7	Final report.	Final week	20%
8	Final Presentation and/or poster presentation.	Final week	20%
	Total		100%

^{*}Assessment task (i.e., Practical test, oral test, presentation, group project, essay, etc.)
b. Assessment Responsibilities

٦	Category	Assessment Responsibility
1	Teaching Staff	Attendance and punctuality at the field location. Preparing the plan or a proposal of work. Dependability and reliability, ability for self-learning and search for information. Maintaining effective relationships with co-workers. Writing a weekly report on his progress. Quality of work output. Final report. Final Presentation and/or poster presentation.
2	Field Supervisor	Attendance and punctuality at the field location. Preparing the plan or a proposal of work. Dependability and reliability, ability for self-learning and search for information. Maintaining effective relationships with co-workers. Writing a weekly report on his progress. Quality of work output. Final Presentation and/or poster presentation.
3	Others (Field Experience committee)	Final report. Final Presentation and/or poster presentation.

C. Field Experience Administration

1. Field Experience Locations

a. Field Experience Locations Requirements

Suggested Field Experience Locations	General Requirements*	Special Requirements**
Saudi Standards and Metrology Organization in Jeddah King Abdulaziz University — Nanotechnology center Modern Technology Laboratories Corporation Laboratory Saudi Aramco The Central Laboratory of the Faculty of Science at any university The Central Laboratory of the Faculty of Science at UQU Water desalination company		-
Saudi Electricity Company Factories or companies related to the field. Radiation centers Research Lab within the department Hospitals		

^{*}Ex: provides information technology, equipment, laboratories, halls, housing, learning sources, clinics etc.

b. Decision-making procedures for identifying appropriate locations for field experience

- 1. After preparing an integrated plan for the field experience by the Field Experience Committee, the head of the department displays the topics of field experience and its location for students to choose what suits them best.
- 2. Then the students apply to choose one of the displayed field experiences.
- Finally, the supervisor provides the student with guidelines about what kinds of tasks the student is supposed to practice at the field location.

2. Supervisory Staff

a. Selection of Supervisory Staff

Selection Items	Field Supervisor	Teaching Staff
Qualifications	Highly qualified field member	Faculty staff
Selection Criteria	appointed by the department	

b. Qualification and Training of Supervisory Staff

(Including the procedures and activities used to qualify and train the supervisory staff on supervising operations, implementing training activities, the follow-up and evaluation of students, etc.)

3. Responsibilities

a. Field Experience Flowchart for Responsibility

including units, departments, and committees responsible for field experience, as evidenced by the relations between them.

 The Field Experience Committee prepares an integrated plan on field experience based on questionnaires for faculty, students and other institutions, and submits it to the department head.

^{**}Ex: Criteria of the training institution or related to the specialization, such as: safety standards, dealing with patients in medical specialties, etc.

- 2. The head of the department displays the topics of field experience and its Institute for students to choose what suits them best.
- 3. The students apply to choose one of the displayed field experiences.
- 4. The supervisor (a faculty staff member) should provide the student with guidelines about what kinds of tasks the student is supposed to practice at the field location.
- 5. The Field Placement Agreements serve as a contract between the University and training organization. These agreements are negotiated annually and must be approved by the Dean of the Applied Science and each organization Superintendent.
- 6. The students work for 16 weeks (1 day a week, and 5 hours a day) during normal semester, and 8 weeks (2 days a week, and 5 hours a day) during summer semester in the experience field location.
- 7. The field supervisor, is responsible for guiding and assigning tasks to the student as well as reporting the student's progress to the supervisor in the Physics department, and both are responsible for 60% of the Total Assessment Score given in table 3-a (items 1-6).
- 8. Finally, the student should give a final report and a presentation about his progress in front of the Field Experience Committee (60% of the Total Assessment Score given in table 3-a (items 7-8).

b. Distribution of Responsibilities for Field Experience Activities

Activity	Department or College	Teaching Staff	Student	Training Organization	Field Supervisor
Selection of a field experience site	4		>	V	
Selection of supervisory staff	V		>		
Provision of the required equipment	4			V	
Provision of learning resources	V			V	
Ensuring the safety of the site	4	<	>	~	V
Commuting to and from the field experience site			>		
Provision of support and guidance		>			V
Implementation of training activities (duties, reports, projects,)			>		
Follow up on student training activities		•			~
Adjusting attendance and leave		>			V
Assessment of learning outcomes	V	V	V	V	V

Activity	Department or College	Teaching Staff	Student	Training Organization	Field Supervisor
Evaluating the quality of field experience	~	4	>	^	y
Others (specify)					

4. Field Experience Implementation

a. Supervision and Follow-up Mechanism

- 1. The student fills the form of the field experience to choose the suited field.
- The site visit should be done by the faculty advisor to collect students' feedback regularly, if they are trained outside the campus.
- 3. Students should prepare Data logbook for daily records.
- 4. Students are expected to give a short report every week to the supervisor.
- 5. Students are expected to evaluate their field training efficiency, supervisor's performance, and all their feedback related to field-work training for improvement purposes to detect the strength and weak points during the training (using a suitable questionnaire)
- 6. Quality Assurance Committee analyzes all questionnaires results and files a full detailed report and provide the department council with the suggested modification.
- 7. Proper actions based on the suggested modifications and recommendations will be taken by the department management and faculty deanship to improve the performance and overcome the challenges facing the field training course practice.

b. Student Support and Guidance Activities

- All fields of training should be displayed to the students, to choose the suitable field training.
- 2. Supervising faculty remains in constant touch with students and his field supervisor.
- 3. The results and recommendations from the supervisors in the training field about the evaluation of the students (their work technically and their exams and reports and presentations) are submitted to the department and then students take corrective measures in presentation and writing skills.
- 4. Students report back to the faculty supervisor for any problem arises during the training.
- 5. Students submit a progress report every week to the academic supervisor by email.

5. Safety and Risk Management

Potential Risks	Safety Actions	Risk Management Procedures
The expulsion of trainee without compelling reasons	Sign Memorandum of Understanding (MoU) with the Field experience institute for providing training to the students.	Select Field experience institute with an agreement in advance.
Injury to the trainee during Field training	Insure for any physical injury suffered by the trainee during the training period.	Select Field experience institute with an agreement in advance.
Claim for financial reimbursements from the college against any expenditure for the	Contract an agreement with the Field experience institute.	Select Field experience institute with an agreement in advance.

completion of training program.	
St. Section Bette	

G. Training Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Training of trainee.	Student Faculty supervisor Field supervisor Field experience committee	Questionnaire. Reports.
Faculty supervision	Student Faculty supervisor Field supervisor Field experience committee	Questionnaire. Reports.
Field supervision	Student Faculty supervisor Field supervisor Field experience committee	Questionnaire, Reports.

Evaluation areas (e.g., Effectiveness of Training and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Supervisory Staff, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

E. Specification Approval Data

Council / Committee	
Reference No.	
Date	