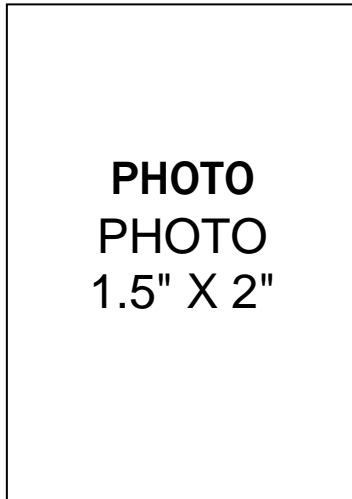


**Emergency Medicine**  
**Accident & Emergency Medicine Academic Unit**  
**The Chinese University of Hong Kong**



Programme : Undergraduate Emergency Medicine Clerkship

Master of Science in Pre-hospital and Emergency Care

Postgraduate Diploma in Pre-hospital and Emergency Care

Name of Student : \_\_\_\_\_

Signature : \_\_\_\_\_

If found, please contact or return to  
Accident & Emergency Medicine Academic Unit,  
Chinese University of Hong Kong at telephone 2632 1033 / 2632 1446.

# INTRODUCTION

## Emergency Medicine

Emergency Medicine is a specialty with the responsibility for the early, rapid management of a variety of acutely and critically ill or injured patients. It differs from other specialties in scope, breadth, volume, variety, organisation and complexity.

Emergency Medicine is defined by the **International Federation for Emergency Medicine (IFEM)** as

“A field of practice based on the knowledge and skills required for the prevention, diagnosis and management of acute and urgent aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioural disorders. It further encompasses an understanding of the development of pre-hospital and in-hospital emergency medical systems and the skills necessary for this development.”

### **Emergency Department, Prince of Wales Hospital**

The Emergency Department (ED) of the Prince of Wales hospital sees approximately 150 000 new patients every year, and is one of the busiest EDs in Hong Kong. It is staffed by 5 consultants, 10 ACs and specialists and about 12 trainees, along with 64 nurses and 26 ancillary staff.

### **The Accident and Emergency Medicine Academic Unit**

The Accident and Emergency Medicine Academic Unit was formed on 2 October 1995 with the primary objective of developing teaching and research programmes in Emergency Medicine. It has 9 full time staff including one Professor/Director, one Professor, one Secretary, two Programme Administrators, four Research Nurses/Assistants, and 47 Honorary Staff.

# GENERAL GUIDELINES

This log book serves as a companion to guide you through your attachment to Emergency Medicine or the Master / Postgraduate Diploma programme.

It contains the basic skills and clinical experience you are expected to learn. Of course, the scope of Emergency Medicine and/or Pre-hospital Emergency Medical Care should not be limited to the items inside the logbook. You are encouraged to record down any special experience which is not covered here.

Knowing how to do something on paper is very different from the ability to perform one particular skill. You are encouraged to obtain as much hands-on experience as possible. Please ask the tutor / instructor to let you perform the skill under their supervision.

Infection control measures are important. Please observe all infection control guidelines whenever you are in the clinical area.

You should record all procedures and patient assessments in this logbook. Clinical attachments and tutorial sessions outside the normal teaching schedule should also be recorded.

You are encouraged to complete all items in the Core Skills section of this logbook. It should be signed and endorsed by an instructor. These are the basic skills which are essential for every pre-hospital and emergency medical care provider.

This book has been designed so that you can carry it with you throughout your shifts. You should refer to it frequently and make notes. It is a summary manual of what you should cover during your attachment and should direct you towards receiving knowledge and training in skills relevant to emergency medicine.

One purpose is to encourage you to ask questions and to seek evidence-based answers on anything and everything relevant to emergency medicine. The Emergency Department should stimulate you to ask questions, to ask what is happening, and why.

Please try and limit the number of students with each doctor and/or patient to a maximum of three during a consultation. This also applies in the Trauma and Resuscitation Rooms.

You should submit your logbook at the end of your attachment.

It is your responsibility to keep your logbook and data entry in order. Loss of it or incomplete data entry will make the assessment of your performance difficult.

## **NOTES TO INSTRUCTORS AND COORDINATORS**

Please note that some clinical skills or procedures are to be performed under supervision. Please try your best to let the student to gain hands on experience through practice.

Please allow the student to participate in patient care as much as possible. This greatly enhances their interest in learning. Please sign and, if needed, comment on the performance. These help to document their learning experience and help by improving their knowledge and skills.

# **OPPORTUNITIES AND OBJECTIVES**

During your attachment we offer you an opportunity to:

1. experience and receive instruction on a broad variety of acutely ill and injured patients
2. learn how to ask relevant questions in a brief period of time in the emergency department
3. learn how to perform a brief, focused, and clinically relevant examination
4. discover how to discriminate life threatening from non-life threatening problems
5. learn what pitfalls to avoid in the emergency department
6. become more proficient in a variety of important practical procedures
7. learn how to communicate with patients, relatives and colleagues.

# **PRIORITIES**

In nearly every avenue of life, people have to set priorities, and nowhere is this more clearly tested than in the emergency medicine environment.

There are two possible ways of approaching problems and establishing diagnoses in the emergency department:

1. To focus on common conditions
2. To focus on serious conditions

## **Common Conditions**

The general guideline that ‘common things are common’ applies as much to emergency medicine as any other specialty. It is more likely that a patient will present with an unusual form of a common disorder than with a rare disorder. Having a list of common disorders in relation to various symptoms, signs and systems and will help you to make a reasonable diagnosis in the majority of cases.

However, because of limitations in resources and time, it is unreasonable to expect emergency physicians to make a completely accurate diagnosis in many cases. Best guess attempts are reasonable for the majority of cases but involve an element of risk. In more serious cases we wish to reduce the risk of misdiagnosis to a minimum. In order to do this we need to alter our focus from thinking of common conditions to thinking of serious ones.

## **Serious Conditions**

It is safer if emergency physicians are orientated towards detecting those cases that are potentially life-threatening or seriously disabling.

Therefore emergency physicians need to have two questions in mind when they see each individual case.

1. What is the most likely diagnosis or possible diagnoses in this patient?
2. Are there any life-threatening or life-disabling possibilities that I need to detect or exclude?

**TEACHING  
AND  
TRAINING  
IN THE  
EMERGENCY  
DEPARTMENT**



# **KNOWLEDGE, SKILLS AND ATTITUDES**

During this attachment we would like you to develop knowledge and skills that are relevant to emergency medicine.

## **Knowledge**

Knowledge will be acquired from:

1. Spending time on the 'shop floor' of the department
2. Tutorials and lectures
3. Asking as many questions as possible
4. Getting involved as much as possible

## **Skills**

Skills will be acquired mainly from spending time in the department but also from some of our practical tutorial sessions.

## **Attitudes**

We shall encourage you to develop optimal attitudes to patients and relatives, staff and team members, and towards lifelong investigation and learning.

## **Evidence and Experience**

Wherever possible we shall encourage an evidence-based approach to patients and problems. However, good evidence for many conditions and also for individual circumstances is frequently not available. At such times the physician needs to call upon wisdom, common sense and experience in order to achieve the optimal outcome. Wherever the evidence is not available, one might consider researching for the answer in the future.

## Questions

The key to learning and developing is to ask questions.

Ask yourself, medical and nursing staff many questions including not only what and how, but especially *why* is something relevant or done or thought?

# Undergraduate Emergency Medicine Clerkship

Specifically, the student will be able to:

1. Describe the correct sequence of priorities for assessing patients with the above symptoms.
2. List the diagnostic possibilities and complications arising from common presenting symptoms and signs.
3. Explain the initial steps for managing patients with these symptoms.
4. State the most appropriate investigations and identify common abnormalities.
5. Perform basic suturing.

## EMERGENCY DEPARTMENT AREAS

**Important** - Students are expected to take the initiative and ask both doctors and nurses for permission to observe and do the above practical procedures. Don't be frustrated if not all your requests are accepted. Keep on asking and you may have a chance next time.

1. Triage area
2. Resuscitation room
3. Trolley area
4. General ('Walk-in') area
5. Plaster room
6. Emergency Medicine Ward (ward rounds with Specialist)
7. ED X-ray and CT rooms
8. Ambulance

# **STUDENT SHIFTS IN THE EMERGENCY DEPARTMENT**

## **A. For Undergraduate Emergency Clerkship Students**

For two weeks, except Wednesday, you will attach to the Emergency Department in two groups:

1. Attach to a senior doctor on the Emergency Department shop floor
2. Attach to a senior doctor in the Emergency Medicine Ward (2C in the Main Clinical Block and Trauma Centre)

You are welcome to attach to the department at other times provided that this does not interfere with other commitments. On Thursday and Friday mornings, you will be attached to the Emergency Department of Alice Ho Nethersole Hospital in Tai Po.

## **B. For Master / Postgraduate Diploma Program Students**

You are required to do a minimum of 36 hours per year of attachment to emergency medical services. You can elect to attach to the Emergency Department of Prince of Wales Hospital and / or other emergency medical service in Hong Kong, such as the Fire Service Department Ambulance Command with the combination of your choice. You are strongly encouraged to attach to a hospital Emergency Department as it will give you more chance to do ‘hands on’ practice of various procedures under supervision. To ensure that the programme is well coordinated, please register with the Education Coordinator of the Academic Unit before your intended date of attachment.



## Section 1- Core Skills:

(Both Medical Student on Emergency Clerkship and Master / Post-graduate Diploma Student)

(Must be performed for and certified by instructor)

<b>A. Essential observations</b>		Date	Signature	Marks
1	Manual pulse recording			2
2	Manual blood pressure			2
3	Automated blood pressure			2
4	Respiratory rate			2
5	Temperature record			2
6	Visual acuity			2
7	Visual analogue pain score			2
8	Apply ECG leads correctly			2
9	Apply oxygen saturation probe			2
10	Glasgow Coma Scale			2

<b>B. Airway</b>		Date	Signature	Marks
1	Manual manoeuvres			6
2	Suctioning			2
3	Insertion of oropharyngeal airway			4
4	Insertion nasopharyngeal airway			4

<b>C. Breathing</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Use of oxygen delivering devices			4
2	Bag-valve-mask ventilation			4

<b>D. Circulation</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Intravenous cannulation (18-20G)			4
2	Intravenous cannulation (14-16G)			6
3	Set up and attach IV fluid infusion			4

<b>E. Initial Investigations</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Take venous blood sample			4
2	12 lead ECG			4
3	15 lead ECG (posterior leads)			4
4	15 lead ECG (right sided leads)			4

<b>F. Point of Care Test</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Glucose measurement (H'stix)			4
2	Urinalysis (dipstix/multistix)			4
3	Haemoglobin measurement			4
4	Perform arterial blood gas			4
5	Pregnancy test			4
6	Faecal occult blood test			4

<b>G. Spinal stabilization</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Application of neck collars			2
2	Application of long spinal board			2
3	Log-rolling of patient			
				2
4	In-line cervical spine stabilization			2



## Section 2 –

Master/ Post-graduate Diploma student must perform the skills in the presence of and be certified by instructor)

<b>A. Basic Life Support</b>		Date	Signature	Marks
1	Adult Basic Life Support (BLS)			4
2	Child Basic Life Support (BLS)			4
3	Infant Basic Life Support (BLS)			4
4	Management of choking patients			4

<b>B. Advanced life support</b>		Date	Signature	Marks
1	Use of Automated External Defibrillator (AED)			4
2	Use of Manual Defibrillator			4

<b>C Patient assessment</b>		Date	Signature	Marks
1	Primary survey (Trauma)			6
2	Primary survey (Non-Trauma)			6
3	Secondary survey (Non-Trauma)			6

<b>D Miscellaneous</b>		Date	Signature	Marks
1	Simple wound dressing			4

### Section 3- Advanced Skills:

(Both Medical Student on Emergency Clerkship and Master / Post-graduate Diploma Student)

(Can be performed or demonstrated to the candidate)

<b>A. Advanced Life Support</b>		Date	Signature	Marks
1	Defibrillation with manual defibrillator			4
2	Synchronised cardioversion			4

<b>B. Advanced Airway Management</b>		Date	Signature	Marks
1	Insertion of laryngeal mask airway			4
2	Insertion of Combitube			4
3	Tracheal intubation			4
4	Cricothyroidotomy			4

<b>C. Ventilation support / procedure</b>		Date	Signature	Marks
1	Mechanical ventilation			4
2	Non-invasion ventilatory support			4
3	Needle thoracostomy			4
4	Tube thoracostomy (chest drain)			4

<b>D. Spinal stabilisation</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Use of alternative technique eg. KED, short spinal board			4

<b>E. Patient assessment and resuscitation</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Adjunct diagnostic tools (X-ray, ultrasound scan, CT scan)			4
2	Central line insertion			4
3	Invasive blood pressure monitoring			4

<b>F. Miscellaneous</b>		<b>Date</b>	<b>Signature</b>	<b>Marks</b>
1	Measure PEFr			2
2	Prepare salbutamol inhaler			2
3	Apply broad arm sling			2
4	Suture of wound			4
5	Application of local anaesthesia			4
6	Application of a POP			4
7	Place a nasogastric tube			4
8	Measure intraocular pressure			4
9	Removal of corneal foreign body			4
10	Release of subungal haematoma			4
11	Gastric lavage			4
12	Femoral nerve block			4
13	Reduction of shoulder dislocation			4
14	Reduction of elbow dislocation			4
15	Reduction of finger / toe dislocation			4
16	Reduction of wrist fracture			4
17				4
18				4

## Section 4 - Case records:

### History & Physical Examination

#### A. Chest pain

Case No.	Date	Signature	Marks
			6
			6
			6

#### B. Shortness of breath

Case No.	Date	Signature	Marks
			6
			6
			6

#### C. Abdominal and/or pelvic pain

Case No.	Date	Signature	Marks
			6
			6
			6

#### D. Back pain

Case No.	Date	Signature	Marks
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			6
			6
			6

### E. Headache

Case No.	Date	Signature	Marks
			6
			6
			6

### F. Dizziness

Case No.	Date	Signature	Marks
			6
			6
			6

### G. Altered mental status

Case No.	Date	Signature	Marks
			6

			6
			6

### H. Eye pain / visual disturbance

Case No.	Date	Signature	Marks
			6
			6
			6

### I. Gastro-intestinal bleeding

Case No.	Date	Signature	Marks
			6
			6
			6

### J. Poisoning / overdose

Case No.	Date	Signature	Marks
			6

			6
			6

### K. Limb injuries

Case No.	Date	Signature	Marks
			6
			6
			6

### L. Multiple trauma

Case No.	Date	Signature	Marks
			6
			6
			6

### M. Others

Case No.	Date	Signature	Marks
			6



			6
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## Section 5- Clinical Experience:

(For Master / Post-graduate Diploma student)

<b>A</b>	<b>Management of critically ill / unconscious patient</b>	<b>Date</b>	<b>Signature</b>
1	Please specify _____		
2	Please specify _____		
3	Please specify _____		
4	Please specify _____		
5	Please specify _____		
6	Please specify _____		
7	Please specify _____		
8	Please specify _____		
9	Please specify _____		
10	Please specify _____		

<b>B</b>	<b>Recognition and management of common arrhythmia</b>	<b>Date</b>	<b>Signature</b>
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1	Ventricular fibrillation		
2	Ventricular tachycardia		
3	Atrial fibrillation		
4	Sinus tachycardia Sinus bradycardia		
5	Supraventricular tachycardia		
6	Cardiac arrest (PEA / Asystole)		
7	Complete heart block		
8	Others, please specify ( _____ )		

<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
1	<b>Cardiovascular system</b>		
	Acute myocardial infarction (AMI)		
	Acute coronary syndrome (ACS)		
	Acute pulmonary oedema		
	Aortic dissection		
	Cardiac tamponade		
	Pericarditis		
	Pulmonary embolism		
	Others, please specify ( _____ )		

<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
<b>2.</b>	<b>Respiratory system</b>		
	Acute asthma		
	Chronic obstructive airway disease (COAD)		
	Pleural effusion		
	Pneumothorax / tension pneumothorax		
	Pneumonia		
	Hyperventilation		
	Others, Please specify ( _____ )		
<b>3.</b>	<b>Gastro-Intestinal system</b>		
	Gastro-intestinal bleeding		
	Peritonitis		
	Acute pancreatitis		
	Acute appendicitis		
	Acute cholangitis / cholecystitis		
	Acute gastroenteritis		
	Others, please specify ( _____ )		

<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
<b>4.</b>	<b>Genitourinary system</b>		
	Retention of urine		
	Haematuria		
	Urinary tract infection		
	Renal colic		
	Others, please specify ( _____ )		
<b>5.</b>	<b>Musculoskeletal system</b>		
	Back pain		
	Fractures and dislocations		
	Shoulder		
	Elbow		
	Knee		
	Distal radius / ulna		
	Fingers / toes		
	Lacerations / abrasion wounds		
	Others, please specify ( _____ )		

<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
<b>6.</b>	<b>Nervous system</b>		
	Stroke		
	Convulsion / seizure		
	Subarachnoid haemorrhage		
	Meningitis		
	Coma		
	Others, please specify ( _____ )		
<b>7.</b>	<b>Metabolic disorders</b>		
	Hypoglycaemia		
	Hyperglycaemia / diabetes mellitus		
	Hyperkalaemia / hypokalaemia		
	Alcohol intoxication		
	Other complications of alcohol		
	Metabolic acidosis		
	Respiratory acidosis		
	Addisonian crisis		
	Others, please specify ( _____ )		

<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
<b>8</b>	<b>Infections</b>		
	Measles		
	Chicken pox		
	Dysentery		
	Cellulitis / soft tissue infection		
	Sepsis / severe sepsis / septic shock		
	Others, please specify ( _____ )		
<b>9.</b>	<b>ENT problems</b>		
	Foreign body in ear		
	Foreign body in nose		
	Foreign body in throat		
	Nasal bleeding		
	Acute epiglottitis		
	Others, please specify ( _____ )		

<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
<b>10</b>	<b>Obstetric and gynaecological problems</b>		
	Labour / delivery		
	Antepartum haemorrhage		
	Post-partum haemorrhage		
	Vaginal bleeding (pregnancy)		
	Ectopic pregnancy		
	Pelvic infection / inflammatory disease		
	Others, please specify ( _____ )		
<b>11.</b>	<b>Paediatric problems</b>		
	Febrile convulsion		
	Febrile child		
	Neonatal jaundice		
	Others, please specify ( _____ )		



<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
<b>12</b>	<b>Trauma</b>		
	Head injury		
	Spinal injury		
	Chest injury		
	Abdominal injury		
	Pelvic fractures		
	Lower limb long bone fracture		
	Vascular injury		
	Penetrating neck injury		
	Others, please specify ( _____ )		
<b>13.</b>	<b>Eye emergency</b>		
	Acute glaucoma		
	Conjunctivitis		
	Acute vision loss		
	Foreign body in eye		
	Ocular injury, ruptured eye ball		
	Others, please specify ( _____ )		

<b>C</b>	<b>Common medical / surgical emergency</b>	<b>Date</b>	<b>Signature</b>
<b>14</b>	<b>Miscellaneous</b>		
	Allergy / anaphylaxis		
	Heat exhaustion / heat stroke		
	Hypothermia		
	Drowning		
	Burns (Please specify: _____)		
	Overdose (Please specify: _____)		
	Others, please specify (_____)		
<b>15.</b>	<b>Other clinical experience (please specify)</b>		

**Section 6- Clinical Sessions:  
(Emergency Medicine Clerkship)**

<b>WEEK 1</b>		<b>Time</b>	
<b>Monday</b>	AM		
	PM		
<b>Tuesday</b>	AM		
	PM		
<b>Thursday</b>	AM		
	PM		
<b>Friday</b>	AM		
	PM		

<b>WEEK 2</b>		<b>Time</b>	
<b>Monday</b>	AM		
	PM		
<b>Tuesday</b>	AM		
	PM		
<b>Thursday</b>	AM		
	PM		
<b>Friday</b>	AM		
	PM		

**Attendance must be signed off by an ED Doctor or Nurse at the time of attendance.**

It is expected that each student will spend at least 30 hours in the Emergency Department.

## Section 7 – Record of Clinical Attachment (Master / Postgraduate Diploma student)

Date	Time	Institution / Department / Facilities	Signature

<b>Total Attachment Hours</b>	
<b>Endorsed by:</b>	

**Section 8 –Notes by student /instructor /coordinator**

**Please specify date and case number**

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**Section 8 –Notes by student /instructor /coordinator**

**Please specify date and case number**

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## RECOMMENDED READING

**Oxford Handbook of Emergency Medicine. Fourth Edition.** By J.P. Wyatt, R.N. Illingworth, C.A. Graham, K. Hogg (Paperback). Oxford University Press, 2012. ISBN: 0199589569

**Practical Prehospital Care: The Principles and Practice of Immediate Care.** By Ian Greaves, Keith Porter, Jason Smith (Paperback). Churchill Livingstone 2011. ISBN: 0443103607

## RECOMMENDED TEXT BOOKS

**PHTLS Prehospital Trauma Life Support (PHTLS: Basic & Advanced Prehospital Trauma Life Support).** By NAEMT (Paperback). Mosby, 2010. ISBN: 0323065023.

**Manual of Emergency Airway Management.** By Ron M. Walls, Robert C. Lutten, Michael F. Murphy, Robert E. Schneider. Lippincott Williams & Wilkins, 2012. ISBN: 1451144911.

**Major Incident Medical Management and Support (third edition) Advanced Life Support Group by BMJ.** By Advanced Life Support Group. Publisher: BMJ, 2012. ISBN: 1405187573.

**ACLS Provider Manual.** By Richard O. Cummins (Paperback). By American Heart Association, April 2011. ISBN: 1616690100.

**Advanced Trauma Life Support for Doctors - Student Course Manual Oct 2008.** Am Coll Surgeons (Paperback). ISBN: 1880696312.

## REFERENCE TEXT BOOKS

**Textbook of Adult Emergency Medicine (4th Edition).** By Peter Cameron, George Jelinek, Anne-Maree Kelly, et al (eds). Published by Churchill Livingstone (part of Elsevier), 2014. ISBN **978-0702053351**.

**Essentials of Medical Statistics.** By Betty Kirkwood, Jonathan Sterne. (Paperback). Publisher: Blackwell Science, 2003. ISBN: 0865428719.

**Designing Clinical Research (4th Edition).** By Stephen B. Hulley, Steven R. Cummings, et al. Lippincott (Paperback). Publishers: Williams & Wilkins, 2013. ISBN: 1608318044.

# ASSESSMENT REQUIRMENTS

In order to pass the Emergency Medicine Clerkship, students should attain **ALL** of the following:

1. 40 marks from Section 1
2. 40 marks from Section 2 & 3
3. 60 marks from Section 4
4. Satisfactory attendance in Section 6

Students who do not meet these requirements will be referred to the and may not be

	<b>Marks</b>	<b>Pass</b>
<b>Section 1</b>		
<b>Sections 2 &amp; 3</b>		
<b>Section 4</b>		
<b>Total</b>		

**Satisfactory Completion**

\_\_\_\_\_  
**Signature of Tutor**