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**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO**

Course in Computer Applications

2015

COMPUTER UNIT

Contents

BACKGROUND	2
RATIONALE	2
COURSE OUTCOMES.....	2
ELIGIBILITY CRITERIA.....	2
COURSE DATES.....	2
DURATION OF THE COURSE	3
SELECTION OF TRAINEES AND INTAKE.....	3
FORMAT OF THE COURSE	3
ATTENDANCE	4
ASSESSMENT	4
SCHEME OF MARKING.....	4
AWARD OF CERTIFICATE	4
COURSE CONTENT: Annexure I.....	5
SAMPLE CERTIFICATE: Annexure II.....	Error! Bookmark not defined.

COURSE IN COMPUTER APPLICATIONS

BACKGROUND

The Course in Computer Applications (CCA) was launched by the PGIM in 2005 with the aim of enhancing the competency in computer applications necessary for day to day professional and academic activities among medical officers. The program was designed to provide a working knowledge of computing concept, components, and operations to accomplish educational and career tasks. Also this program will enable the participants to use appropriate computer applications involving word processing, spreadsheet and database applications, literature search, data analysis and presentation for their academic and professional work.

RATIONALE

Information and communication technology is a rapidly growing field and there are substantial changes in the field of computers and communication technologies in the recent past. In addition, computers and information technology has been introduced to the health care system in the country. There is a demand for this course among medical officers who wish to update their skills in computer applications. This enables them to carry out their research and teaching and learning activities more efficiently. Therefore, the Course in Computer Applications (CCA) curriculum has been designed incorporating the latest software and computer technology. This course is conducted by the Board of Study in Multidisciplinary Study Courses (MDSC).

COURSE OUTCOMES

The Course in Computer Applications will provide participants with knowledge in basic computer skills and hands on experience in computer applications which are essential for their day to day professional and academic activities.

At the end of CCA, participants should be competent in:

1. performing fundamental operation system functions
2. the use computers in a secure manner
3. use of common software applications such as word processing, spread sheet applications, presentation software, database applications and data analysis
4. conducting a literature search
5. using the internet for electronic communication and sharing resources

ELIGIBILITY CRITERIA

1. MBBS/BDS degree or equivalent registered with the SLMC
2. All registered PGIM trainees

COURSE DATES

The course dates will be posted on the PGIM website.

DURATION OF THE COURSE

The CCA is conducted on 08 Saturdays from 12.30 PM to 5.30 PM.

SELECTION OF TRAINEES AND INTAKE

A maximum number of 20 participants may be enrolled in each batch on first come first serve basis.

FORMAT OF THE COURSE

Day	Session	Lesson
Day 1	Session 1	Introduction to computers , Computer hardware
	Session 2	Introduction to Operating Systems and Computer Applications
Day 2	Session 1	Internet and social networking
	Session 2	Search engines and Email
Day 3	Session 1	MS word
	Session 2	MS word
Day 4	Session 1	Bibliographic Reference Management Software: EndNote
	Session 2	MS Power point
Day 5	Session 1	MS Excel
	Session 2	MS Access
Day 6	Session 1	Medline search
	Session 2	Medline search
Day 7	Session 1	Data Analysis Using SPSS
	Session 2	Data Analysis Using SPSS
Day 8	Session 1	Revision
	Session 2	Revision

ATTENDANCE

The participants should have at least 80% attendance to be eligible to sit for the end of course assessment in order to obtain the certificate of completion.

ASSESSMENT

1. The assessment will be held within 3 weeks from the completion of course modules.
2. Duration – 90 minutes
3. Participants are required to successfully complete 4 practical tasks based the Microsoft Office components. (Word, Excel, PowerPoint and Access).

SCHEME OF MARKING

Component	Mark
Word	100
Excel	100
PowerPoint	100
Access	100
Total	<u>400</u>

AWARD OF CERTIFICATE

The participants should obtain a pass mark of 50% (200/400) or more of the total aggregate with a minimum of 40% in each component in order to be eligible to obtain the certificate of completion.

COURSE CONTENT

The programme will cover the following areas:

1. Introduction to Computers and Computer Hardware

- History and evolution of computers
- IPO Model
- Components of a computer and accessories
- Use of accessories and basic troubleshooting
- Understanding Computer Configuration

2. Introduction to Operating Systems and Computer Applications

- Need for OS
- Basic components of OS
- Types of OS
- Difference between system software and application software
- Introduction to windows 7
- Installing software
- Utility software
- File management
- Using accessory software
- Desktop management
- Accessing programmes
- Virus scanning software

3. Word processing (Introduction to Microsoft Word)

- Getting started
- Typing practice software
- Working with documents
- Customize the word environment
- Page formatting
- Editing a document
- Formatting text formatting paragraphs
- Graphics
- Adding tables
- Table of contents
- Proofing a document
- Lists
- References and citations
- Styles
- Track changes

4. Spreadsheets (Introduction to Microsoft Excel)

- Getting started customize excel
- Working with a workbook
- Formatting a worksheet
- Manipulating data
- Developing a workbook
 - ❖ Modifying a worksheet
 - ❖ Sort and filter
- Performing calculations
- Customize the layout
- Page properties and printing charts
- Graphics

5. Presentations (introduction to Microsoft PowerPoint)

- Getting started
- Customize
- Creating a presentation
- Working with content
- Formatting text
- Adding content
- Tables
- Charts
- Graphics
- Slide effects
- Printing
- Presentation Tips

6. Database management (Introduction to Microsoft Access)

- Understanding the databases
- Creating a table
- Entering data
- Creating queries
- Creating reports

7. Introduction to internet, social networks and search engines

- Networks
- Basic principles
- TCP/IP
- Downloading web pages/sites/ Pictures
- Browsing
- Medically related web sites and how to evaluate them
- Search engines
- Online learning
- Learning tools
- Social networks
- Google scholar search

8. Email basics (Basic concept in Web Mail)

- Setting up web email account
- Basic email functions

9. Data Analysis (Approaches to Analysis of Data and SPSS)

- What is data/information?
- Approach to analyze data
- Types of analysis
- Types of variables
- Unit and level of analysis
- Introduction to SPSS package

10. Computer Based Literature Searching Techniques)

- What is a medical information database?
- What is MEDLINE
- Controlled vocabulary (Subject searching)
- What is PUBMED
- Free text searching
- Searching PUBMED

- Keyword searching
- Displaying search results
- Search techniques
- Printing and saving search results

11. Bibliographic Reference Management Software: End-Note

- Creating a new file using EndNote
- Enter a new reference
- Attach Figures/PDF Documents
- Deleting References
- Search PubMed and download references from PubMed to Endnote
- Direct export references from databases
- Change the fields displaying on your Library
- Use Endnote to Cite While You Write (CWYW)
- Change output style
- Chang Bibliography
- Create and email a compressed EndNote Library