DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY

Overview
The main objective of this program is to produce Medical Laboratory Technologist (MLT) who has the expertise and efficiency in various fields of Medical Laboratory Technology so that they will be competent in performing their duties at the Clinical Diagnostic Laboratory and other laboratories that are involved in teaching and research pertaining to medicine and Bio-Medical services.

Benefits
At the end of this program, the graduates will be able to:
1. Apply knowledge related to medical science field.
2. Perform medical laboratory procedures according to standard practice.
3. Carry out responsibility for personal, patient and environmental safety.
4. Serves as a professional medical laboratory technologist.
5. Demonstrate effective communication, leadership and teamwork within the organization.
6. Completely and accurately solving problems related to laboratory tasks.
7. Adapt to the latest advances in professional development.
8. Use resources at a cost-effective basis.

Career
Students who have successfully completed the course can find employment in the private and public sectors as MLTs in the following areas:
• Service sectors - in the hospitals health and diagnostic laboratories
• Teaching and laboratory – support service in colleges and universities
• Research – in universities and research centres
• Industrial and management sectors

There are ample opportunities for career advancement through Continuing Education Programs. For instance, graduates with Diploma can pursue a bachelor degree in biomedical sciences at the local universities.

Programme structure
This is a three years full-time course. Course content comprise of theoretical, practical and clinical components. The theoretical components include lectures, tutorials, problem based-learning and discussion. The practical components include demonstrations and hands-on. The clinical component is the clinical posting in the clinical diagnostic laboratories of University Malaya Medical Centre.

Credit System and Values
Credit requirement for the award of the Diploma = 98 credits
CGPA requirement for the award of the Diploma = Above 2.0
### Year 1

<table>
<thead>
<tr>
<th>Course Classification</th>
<th>Code</th>
<th>Subject</th>
<th>C</th>
<th>Course Classification</th>
<th>Code</th>
<th>Subject</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory (University)</td>
<td>GDG 1001</td>
<td>Malaysian Studies</td>
<td>3</td>
<td>Compulsory (University)</td>
<td>GLM 1001</td>
<td>English For Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 1001</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
<td>4</td>
<td>Core</td>
<td>MDC 1006</td>
<td>Laboratory Sciences &amp; Instrumentation II</td>
<td>3</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 1002</td>
<td>Introduction to Biochemistry</td>
<td>3</td>
<td>Core</td>
<td>MDC 1007</td>
<td>Clinical Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 1003</td>
<td>Laboratory Sciences &amp; Instrumentation I</td>
<td>3</td>
<td>Core</td>
<td>MDC 1008</td>
<td>Genetics &amp; Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 1004</td>
<td>Communication</td>
<td>3</td>
<td>Elective</td>
<td>MDC 1009</td>
<td>Principle of Laboratory Animal Sciences</td>
<td>2</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 1005</td>
<td>Clinical posting I</td>
<td>2</td>
<td>Elective</td>
<td>MDC 1010</td>
<td>Introduction to Pharmacology &amp; Toxicology</td>
<td>2</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 1006</td>
<td>Laboratory Sciences &amp; Instrumentation II</td>
<td>3</td>
<td>Core</td>
<td>MDC 1011</td>
<td>Basic Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 1008</td>
<td>Clinical posting II</td>
<td>2</td>
<td>Core</td>
<td>MDC 1012</td>
<td>Clinical posting II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credit</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Total Credit</strong></td>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Course Classification</th>
<th>Code</th>
<th>Subject</th>
<th>C</th>
<th>Course Classification</th>
<th>Code</th>
<th>Subject</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>MDC 2004</td>
<td>Immunology</td>
<td>3</td>
<td>Core</td>
<td>MDC 2001</td>
<td>Clinical Biochemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 2002</td>
<td>Basic Medical Microbiology</td>
<td>3</td>
<td>Core</td>
<td>MDC 2009</td>
<td>Transfusion Science &amp; Blood Banking I</td>
<td>3</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 2003</td>
<td>Pathology</td>
<td>4</td>
<td>Core</td>
<td>MDC 2010</td>
<td>Hematology I</td>
<td>3</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 2004</td>
<td>Immunology</td>
<td>3</td>
<td>Core</td>
<td>MDC 2011</td>
<td>Cytopathology</td>
<td>3</td>
</tr>
<tr>
<td>Course Classification</td>
<td>Code</td>
<td>Subject</td>
<td>C</td>
<td>Course Classification</td>
<td>Code</td>
<td>Subject</td>
<td>C</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------</td>
<td>--------------------------------------</td>
<td>---</td>
<td>-----------------------</td>
<td>--------</td>
<td>--------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Elective</td>
<td>MDC 2005</td>
<td>Psychology &amp; Behavioral Sciences</td>
<td>2</td>
<td>Core</td>
<td>MDC 2012</td>
<td>Clinical Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>MDC 2006</td>
<td>Humanities</td>
<td>2</td>
<td>Core</td>
<td>MDC 2013</td>
<td>Clinical posting</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>MDC 2007</td>
<td>Health Care Ethics</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core</td>
<td>MDC 2008</td>
<td>Clinical posting 3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit</strong></td>
<td></td>
<td></td>
<td>17</td>
<td><strong>Total Credit</strong></td>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>July – December (21 weeks)</td>
<td>Jan – June (21 weeks)</td>
</tr>
<tr>
<td><strong>Course Classification</strong></td>
<td><strong>Code</strong></td>
</tr>
<tr>
<td>Core</td>
<td>MDC 3001</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 3002</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 3003</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 3004</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 3005</td>
</tr>
<tr>
<td>Core</td>
<td>MDC 3006</td>
</tr>
<tr>
<td><strong>Total Credit</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Overall Credit</strong></td>
<td></td>
</tr>
</tbody>
</table>
Clinical Posting Assessment.
Clinical posting will be assessed formatively and summatively. The formative element will enable problems to be identified and rectified at an early stage, and will enable the student to build confidence within a safe learning environment. Student's performance on clinical posting will be graded based on the summative assessment.

Formative assessment:
2. Reflection / Conference.
3. Presentation of Case study.

Summative assessment:
1. Clinical assessment (knowledge and skills).
2. Laboratory report.
3. Objective structured clinical examination (OSCE).
4. Logbook.
5. Feedback form.

Entry requirements
- Pass Sijil Pelajaran Malaysia (SPM) with: Credit in Bahasa Melayu (including pass in oral test) AND
- Credit in English, Mathematic & Sciences. Preference will be given to candidates from Pure Sciences Streams & obtain credit in Chemistry & Biology
- Must be at least 18 years old on the date of application.
- Age: 18 - 25 years
- Marital Status: Single
- Gender: Male and Female
- Intake: Once a year (after the announcement of SPM result)

Duration of Program
6 Semesters (3 years)

Class Schedule
Class – Monday to Friday
Time – 8.00 am - 5.00 pm

Assessment method
Continuous Assessment 40%
End of Semester Examination / Course 60%

Medium instruction
The course is conducted in Bahasa Malaysia and English.

Class location
College of Health Sciences, UMMC Wisma R&D
University of Malaya Medical Centre

Intake schedule
June/July each year
*The date for application will be advertised in the website four (4) month before the course is offered.

Fees
Programme Fees
RM45,000.00

Contacts
Cik Puziah binti Md Zin
Principal
College of Health Sciences UMMC
University Malaya Medical Centre
Level 2, Wisma R&D UM
Jalan Pantai Baharu
59200 Kuala Lumpur.
+603-2028 7043 /+603-2028 7015
+603-7949 7707
www.ummc.edu.my

En. Shamshy bin Jamaluddin
Head
Medical Laboratory Technology Program
College of Health Sciences UMMC
University Malaya Medical Centre
Level 2, Wisma R&D UM
Jalan Pantai Baharu
59200 Kuala Lumpur.
+603-2028 7001 /+603-2028 7077
+603-7949 7707
www.ummc.edu.my