

FACULTY OF HEALTH SCIENCES AND SPORTS BACHELOR OF SCIENCE IN BIOMEDICAL TECHNOLOGY (MEDICAL LABORATORY TECHNOLOGY) LEARNING MODULE OUTLINE

| Academic Year | 2023-2024 | Semester | 1 | |
|-----------------------|---|-----------------------|-----------|--|
| Module Code | BSLP1101 | | | |
| Learning Module | Introduction to Laboratory Science Profession | | | |
| Pre-requisite(s) | Nil | | | |
| Medium of Instruction | Chinese & English | | | |
| Credits | 1 | Contact Hours | 15 | |
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MODULE DESCRIPTION

This module introduces areas of medical laboratory science; Ethics and works of medical laboratory profession.

On the other hand, discuss the current situation of medical laboratory occupation in Macao. Through this module, students are ready to further study others module of this course.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

On completion of this learning module, students will be able to:

| M1. | Understand ethics and works of medical laboratory profession | |
|-----|--|--|
| M2. | Understand the history of medical laboratory profession | |
| M3. | Understand the perspective of the medical laboratory career in Macao | |

These ILOs aims to enable students to attain the following Programme Intended Learning Outcomes (PILOs):

| PILOs | | M2 | M3 |
|--|--------------|--------------|--------------|
| P1. To demonstrate understanding of a range of subjects, fields, principles and approaches relevant to medical laboratory technology | \checkmark | \checkmark | \checkmark |
| P2. To demonstrate understanding of theories, analytical approaches and practices that underpin medical laboratory operations and management | | | |
| P3. To demonstrate understanding of major trends and issues related to medical laboratory technology | \checkmark | \checkmark | \checkmark |



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| P4. | To apply professional knowledge and skills to analyse, interpret and solve problems, challenges and risks in medical laboratory practice | | | |
|-----|--|--------------|--------------|--------------|
| P5. | To critically appraise and interpret scientific and clinical literature and apply evidence-based practice | | | |
| P6. | To acquire and apply research skills in medical laboratory technology | | | |
| P7. | To demonstrate effective communication and teamwork skills | \checkmark | \checkmark | \checkmark |
| P8. | To maintain professional and ethical standards in medical laboratory practice and research | \checkmark | \checkmark | \checkmark |

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Content

| Theory | | |
|--|---|--------|
| 1. | Introduction of Medical laboratory Science & Public Health Analysis 1.1 History and development of medical laboratory profession; 1.2 Education of medical laboratory science; 1.3 Duty of medical laboratory technician | 2 hrs |
| 2. | Ethic, License, and Law 2.1 Ethics of medical laboratory science. 2.2 License, Law, and ethic. 2.3 License of Medical Laboratory Technician in Macao | |
| | Visits | |
| 1. | Kiang Wu Hospital of Macao Medical Laboratory and Pathology Laboratory | 3 hrs |
| 2. Laboratory Division of Municipal Affairs Bureau | | |
| 3. Clinical and Pathology Laboratories of Centro Hospitalar Conde de São Januário de Macau | | 3 hrs |
| 4. Centro de Transfusões de Sangue (Blood Transfusion Centre) | | 3 hrs |
| Tot | tal | 15 hrs |



TEACHING AND LEARNING ACTIVITIES

In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities:

| Teaching and Learning Activities | M1 | M2 | M3 |
|--|--------------|--------------|--------------|
| T1. Interactive lectures Lectures: PowerPoint slides is presented and other supplementary materials provided if necessary Q & As: Raising different questions can draw student interest to the lecture they learn. | \checkmark | V | \checkmark |
| T2. visitss ■ Through visits, students obtain more realistic impression of the "Medical Laboratory Science" profession in Macao | | \checkmark | \checkmark |
| T3. Assignments In- depth knowledge learning can be attained by actively learning from students through their assignments | | ~ | \checkmark |

Alignment of MILOS with Teaching and Learning Activities

| Activities | M1 | M2 | M3 |
|----------------------|--------------|--------------|--------------|
| Interactive lectures | \checkmark | \checkmark | \checkmark |
| Assignments | | \checkmark | \checkmark |

ATTENDANCE

Attendance requirements are governed by the Academic Regulations Governing Bachelor's Degree Programmes of the Macao Polytechnic University. Students who do not meet the attendance requirements for the learning module shall be awarded an 'F' grade.

ASSESSMENT

In this learning module, students are required to complete the following assessment activities:

| Assessment Activities | Weighting (%) | ILOs to be Assessed | |
|--|---------------|---------------------|--|
| A1. Report 1: Site visits | 50% | M1, M2, M3 | |
| A2. Report 2: Topics in Medical Laboratory Science | 50% | M1, M2, M3 | |

This learning module is graded on a 100-point scale, with 100 being the highest possible score and 50 being the passing score.

The assessment will be conducted following the University's Assessment Strategy (see <u>www.mpu.edu.mo/teaching_learning/en/assessment_strategy.php</u>). Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits.

Note: There will be no re-sit Examination or any make up for this module.



MARKING SCHEME

| Marks Ranges | Grade | Grade Point | Grade Definitions** |
|--------------|-------|-------------|---------------------|
| | | | |
| 93–100 | А | 4.0 | Excellent |
| 88-92 | A- | 3.7 | |
| 83 - 87 | B+ | 3.3 | Very Good |
| 78-82 | В | 3.0 | Good |
| 73 – 77 | B- | 2.7 | |
| 68–72 | C+ | 2.3 | Satisfactory |
| 63–67 | С | 2.0 | |
| 58-62 | C- | 1.7 | |
| 53 - 57 | D+ | 1.3 | Passed |
| 50 - 52 | D | 1.0 | |
| 0-49 | F | 0 | Failed |

Generic descriptions of each grade are given below:

- **Excellent:** Strong evidence of original thinking; good organisation, capacity to analyse and systemise; superior grasps of subject matter; strong evidence of extensive knowledge base.
- **Very Good:** Evidence of grasps of subject; strong evidence of critical capacity and analytical ability; good understanding of issues; evidence of familiarity with literature.
- **Good:** Evidence of grasp of subject; some evidence of critical capacity and analytical ability; reasonable understanding of issues; evidence of familiarity with literature.
- Satisfactory: Profiting from the study experience; understanding of the subject; ability to develop solutions to simple problems in the material.
- **Pass:** Sufficient familiarity with the subject matter to enable the student to progress without repeating the learning module.
- **Fail:** Little evidence of familiarity with the subject matter; weak in critical and analytical skills; limited, or irrelevant use of literature.

REQUIRED READINGS

Nil

REFERENCES

1. 臨床檢驗基礎 趙建宏 賈天軍 2015 人民衛生出版社



STUDENT FEEDBACK

At the end of every semester, students are invited to provide feedback on the learning module and the teaching arrangement through questionnaires. Your feedback is valuable for instructors to enhance the module and its delivery for future students. The instructor and programme coordinators will consider all feedback and respond with actions formally in the annual programme review.

ACADEMIC INTEGRITY

The Macao Polytechnic University requires students to have full commitment to academic integrity when engaging in research and academic activities. Violations of academic integrity, which include but are not limited to plagiarism, collusion, fabrication or falsification, repeated use of assignments and cheating in examinations, are considered as serious academic offenses and may lead to disciplinary actions. Students should read the relevant regulations and guidelines in the Student Handbook which is distributed upon the admission into the University, a copy of which can also be found at www.mpu.edu.mo/student_handbook/.