Republic of the Philippines
PHILIPPINE STATE COLLEGE OF AERONAUTICS
INSTITUTE OF COMPUTER AND SCIENCE
Piccio Garden, Villamor, Pasay City

Acc. No.: M2700903PM

OFFICE OF THE VICE PRESIDENT FOR ACADEMIC AFFAIRS
Second Semester, Academic Year 2020 – 2021

COURSE SYLLABUS

Course Code : AIS 421
Course Title : AIRPORT AND RAMP HANDLING PROCEDURE
Course Type and Credit : 3 Units (Lecture 3 Hours)
Pre-requisite : None
Co-Requisite : None

COURSE DESCRIPTION

This subject explains the basic principles, relationships and importance of the different types and basic design of airports, Airport structures and facilities, different airport signs and markings of runways and taxiways, and for the safe and efficient control of operations in an airport. This subject provides a body of information that will allow students to gain knowledge of the various facets of different types of airports and classes of airspace. This subject focuses to build a solid foundation of understanding of all the elements concerning airports, runways, taxiways, ramps, and how important the airports today. A combination of Flexible and Residential Modalities will be the mode of instructions. The flexible phase will mainly be through student-centered learning modules distribution integrated with scheduled synchronous online meetings, while topics requiring actual face-to-face learning shall be conducted towards the latter third of the semester.

COURSE LEARNING OUTCOME

At the end of the semester, students should be able to:
CLO 1. Express the ideas on the history and development of airport and its application nowadays.
CLO 2. Explains the basic and primary function of airports and its category.
CLO 3. Identify the different structure design of an airport, facilities and equipment available on airport.

CLO 4. Identify the difference between the two airport system classifications.
CLO 5. Explain effectively the different types of runways and taxiways.
CLO 6. Discuss the different types of runways, taxiways, airspace and their function.
CLO 7. Able to differentiate the types of pavement classification number on runways and taxiways.
CLO 8. Explains the basic and primary function of airports and its category.
CLO 9. Explains the types and classes of airspace.
CLO 10. Able to participate actively in full filling assigned task and develop the sense of responsibility.

LEARNING OUTCOMES FOR PRELIMINARY PERIOD (FLEXIBLE TEACHING LEARNING MODALITIES)

Course Learning Outcomes	Topic Learning Outcomes
CLO1	TLO 1. Differentiate the concepts of early airport designs.
CLO1, CLO2, CLO3	TLO 2. Identify the different structures and terminal designs of an airport
CLO1, CLO2, CLO3	TLO 3. Discuss the different kinds and types of airport.
CLO1, CLO2, CLO3	TLO 4. Identify other types of facilities and equipment available on an airport
CLO1, CLO3, CLO4	TLO 5. Discuss the ATO/ CAAP system classification and airport wind direction indicators and signage

LEARNING PLAN

WEEK	MODULE NO. AND TOPIC LEARNING OUTCOME	MODULE LEARNING OUTCOMES	FLEXIBLE TEACHING-LEARNING MODULE ACTIVITIES	TECHNOLOGY ENABLER	ASSESSMENT STRATEGY	ALLOTTED HOURS
WEEK 1	**MODULE 1** **INTRODUCTION TO AIRPORT** TLO 1 TLO 2	MLO 1. Discuss the airport that details a location where aircraft takeoff and land. MLO 2. Explains the important details of airport history and its development. MLO 3. Identify the code that an airport is using that can be an ICAO or IATA airport code. MLO 4. Able to describe the development of an airport.	• Distribution of Course Syllabus • Course Overview • Discussion on introduction of an airport • Timeline of historical events on Airport Development • Readings about Airport designation and naming • A short research activity describing the development of an airport	Online Learning Platform Power point Presentation PDF	Formative Assessment: Online Quiz/Research	3.93

WEEK 2	**MODULE 2 AIRPORT STRUCTURE & TERMINAL DESIGN** TLO 1 TLO 2	MLO 1. Explain the airside area that tackles the runway, taxiway and airport ramp areas MLO 2. Discuss the landside area that uses a long, narrow building with aircraft parked on both sides. MLO 3. Identify the type of designs for terminal based on its structure. MLO 4. Able to differentiate the various structures and terminal designs of an airport.	• Discussion about the Airside and Landside Areas • Readings about Pier Terminal Design • Readings about Satellite Terminal Design • Readings about Semicircular Design • A short research activity on differentiating the various structures and terminal designs of an airport	Online Learning Platform Power point Presentation PDF	Formative Assessment: Online Quiz/Research	3.93

WEEK 3	**MODULE 3** **KINDS & TYPES OF AN AIRPORT** TLO 1 TLO 3	MLO 1. Explain the international airport as an airport typically equipped with customs and immigration facilities to handle international flights to and from other countries. MLO 2. Discuss the domestic airport as an airport which handles only domestic flights or flights within the same country. MLO 3. Identify the several types of general aviation airport. MLO 4. Differentiate the controlled & uncontrolled type of airport. MLO 5. Able to differentiate the various kinds and types of airport.	• Discussion on International Airport • Discussion on Domestic Airport • Readings about General Aviation airport • Demonstration on Controlled Airport • Demonstration on Uncontrolled Airport An activity identifying and differentiating the various kinds and types of airport	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/Research	3.93

WEEK 4	**MODULE 4** **FACILITIES & EQUIPMENT AVAILABLE ON AN AIRPORT** TLO 4	MLO 1. Explain the facilities on an airport that provides optimum service satisfaction to travelers on transits. MLO 2. Distinguish the airport ground equipment that lists all the equipment used on an airport. MLO 3. Able to identify the types of facilities and equipment available on an airport.	• Readings and discussion on Facilities on Airport • Research on the Equipment available on an Airport • An activity identifying other types of facilities and equipment available on an airport	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/Research	3.93
	MODULE 5 **ATO AND CAAP AIRPORT CLASSIFICATION** TLO 5	MLO 1. Discuss the old ATO system that divided airports into five classifications under two broad categories: international and domestic airports, and CAAP System that revises the previous ATO system. MLO 2. Identify the difference between the two airport system classifications.	• Discussion on an old ATO System • Discussion on CAAP System • An activity pertaining to differentiations of ATO and CAAP system	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/Research	

WEEK 5		MLO 3. Able to differentiate of ATO and CAAP system.				3.93
	MODULE 6 **AIRPORT WIND DIRECTION INDICATORS & AIRPORT SIGNS** TLO 5	MLO 1. Compare the different wind indicators used on an airport to indicate the wind directions. MLO 2. Identify the different airport signs that may be found at airports. MLO 3. Able to elaborate on airport wind direction indicators and signage.	• Discussion on Windsock • Discussion on Wind Tee • Discussion on Tetrahedron • Readings and discussion of Airport Signs • Guided questions to clearly elaborate on airport wind direction indicators and signage	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/Research	
WEEK 6	**PRELIMINARY EXAMINATION**					

LEARNING OUTCOMES FOR MIDTERM PERIOD (FLEXIBLE TEACHING LEARNING MODALITIES)

Course Learning Outcomes	Topic Learning Outcomes
CLO3, CLO5, CLO7	TLO 1. Identify its various runway design, pavement to be used on an airport
CLO5, CLO6	TLO 2. Demonstrate deep understanding on different types of runways and taxiways.
CLO5, CLO6,	TLO 3. Identify the different types of Runway and Taxiways Lights.
CLO5, CLO6, CLO7	TLO 4. Discuss the different types of runway, taxiway marking and signs.
CLO1, CLO6, CLO7	TLO 5. Identify the airport runway ramp and runway designation and numbering.

LEARNING PLAN

WEEK	MODULE NO. AND TOPIC LEARNING OUTCOME	MODULE LEARNING OUTCOMES	FLEXIBLE TEACHINGLEARNING MODULE ACTIVITIES	TECHNOLOGY ENABLER	ASSESSMENT STRATEGY	ALLOTTED HOURS
WEEK 7	**MODULE 1** **RUNWAY SAFETY AREA, DESIGN AND PAVEMENT SURFACE TYPE** TLO 1	MLO 1. Explain the runway & runway safety area on which aircraft can take off and land and forms part of the maneuvering area. MLO 2. Describe the designing of airport runway that tackles	• Readings and discussion of Runway & Runway Safety Area • Readings on Designing an Airport Runway • Readings and discussion Runway Pavement Surface Type Description	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/Research	3.93

	TLO 2	the importance of runway design. MLO 3. Identify the runway pavement surface type description used on runways.	A research activity for outdated airport runway designs			
WEEK 8	**MODULE 2** **THICKNESS, LENGTH, WIDTH & MARKINGS OF A RUNWAY** TLO 1 TLO2	MLO 1. Discuss the minimum Runway Thickness, Width, & Length. MLO 2. Determine an active runway, and various types of runway markings and uses. MLO 3. Able to elaborate on the runway showing various thickness, length, width and markings.	• Discussion on Runway Thickness, Width, & Length • Readings and discussion on Active Runway and Runway Markings • Guided questions to clearly elaborate on the runway showing various thickness, length, width and markings	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/Research	3.93

WEEK 9	**MODULE 3** **TYPES, DECLARED DISTANCE, CONFIGURATION & SECTIONS OF A RUNWAY** TLO 1 TLO 2	MLO 1. Explain the three common types of runway markings for visual, non-precision, and precision instrument runways. MLO 2. Determine the different declared distance terms used on declaring distance to a runway. MLO 3. Discuss the four basic runway configurations. MLO 4. Describe the various runway sections and uses. MLO 5. Able to demonstrate the configuration of runway.	• Discussion on Three Common Types of Runway Readings and discussion on Declared Distance • Reading and research on Runway Configurations, Sections of Runway • A research activity demonstrating the configuration of runway	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/ Research	3.93

WEEK 10	**MODULE 4** **RUNWAY & TAXIWAY LIGHTS** TLO 2 TLO 3	MLO 1. Explain the runway lightings that were used at airports which allow night landings. MLO 2. Describe the various lights intended for taxiing. MLO 3. Able to recognize the various lights used for runway and taxiways.	• Discussion on Runway Lightings • Readings and discussion on Taxiway Lightings • An activity recognizing the various lights used for runway and taxiways	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/ Research	3.93

WEEK 11	**MODULE 5** **TAXIWAY MARKINGS & SIGNS** TLO 2 TLO 4	MLO 1. Explain the taxiway as a path on an airport connecting runways with ramps, hangars, terminals and other facilities. MLO 2. Describe the different markings that can be seen during taxiing. MLO 3. Demonstrate the taxiway lights that used specifically for night operations. MLO 4. Identify the runway and taxiway signs that explains the various signs that can be seen on a runway and taxiway and its use. MLO 5. Able to recognize the various markings and signs used for taxiways.	Discussion on Taxiway • Readings and discussion on Taxiway Markings • Discussion on Taxiway Lights • Readings and discussion on Runway and Taxiway Signs • An activity recognizing the various markings and signs used for taxiways	Online Learning Platform, Power point Presentation PDF	Formative Assessment: Online Quiz/Research	3.93
	MODULE 6 **AIRPORT RAMP, RUNWAY**	MLO 1. Describe an airport runway threshold that provides visual descent guidance	• Discussion on Visual Glideslope Indicators	Online Learning Platform, Power point	Formative Assessment: Online	

	DESIGNATION AND NUMBERING TLO 2 TLO 5	information during the approach to a runway. MLO 2. Describe the airport ramp that serves as an actual part of an airport that serves its own purpose in day to day operations. MLO 3. Identify the airport runway designation and numbering that tackles runway reciprocal numbers and the numerical number that is assigned based on the compass heading the runway. MLO 4. Able to recognize the Airport Runway Designation and Numbering.	• Readings and discussion on Airport Ramp • Discussion on Airport Runway Designation and Numbering • An activity recognizing the Airport Runway Designation and Numbering	Presentation PDF	Quiz/Research	
WEEK 12	**MIDTERM EXAMINATION**					

LEARNING OUTCOMES FOR FINAL PERIOD (RESIDENTIAL TEACHING LEARNING MODALITIES)

Course Learning Outcomes	Topic Learning Outcomes
CLO8, CLO9	TLO 1. Discuss the types and classes of airspace.
CLO8, CLO9	TLO 2. Identify and describe the various categories, kinds and other airspace.
CLO8, CLO9, CLO10	TLO 3. Discuss and identify the air traffic control and functions.
CLO8, CLO9, CLO10	TLO 4. Describes an air traffic facility that provides information and services to aircraft pilots before, during, and after flights, but unlike air traffic control (ATC).

LEARNING PLAN

WEEK	MODULE NO. AND TOPIC LEARNING OUTCOME	MODULE LEARNING OUTCOMES	RESIDENTIAL TEACHING-LEARNING MODULE ACTIVITIES	TECHNOLOGY ENABLER	ASSESSMENT STRATEGY	ALLOTTED HOURS
WEEK 13	**MODULE 1** **CATEGORIES & KINDS OF AIRSPACE** TLO 1	MLO 1. Discuss the airspace portion of the atmosphere controlled by a country above its territory, including its territorial waters or, more generally, any specific threedimensional portion of the atmosphere.	• Discussion on Airspace • Discussion on Categories of Airspace • Discussion on Kinds of Airspace • Discussion on Other	Power point Presentation PDF	Formative Assessment: Quiz/Research	1.54

	TLO 2	MLO 2. Determine the categories of airspace that describes the controlled and uncontrolled types of airspace. MLO 3. Discuss the different kinds of airspace as well as the other airspace areas.	Airspace areas • Short quiz			
WEEK 14	**MODULE 2** **CLASSES, NON-REGULATORY & SPECIAL USED AIRSPACE** TLO 1 TLO 2	MLO 1. Explain the Class A, B, C, D & E Airspaces. MLO 2. Describe the NonRegulatory Airspace that includes the Military Operations Areas (MOA), Alert Areas, and Controlled Firing Areas. MLO 3. Identify the Special Use Airspace where activities must be confined due to their nature.	• Discussion on Class A, B, C, D & E Airspaces • Readings and discussion on Non-Regulatory Airspace • Discussion on Special Use Airspace • Recitation	Power point Presentation PDF	Formative Assessment: Quiz/Research	1.54

WEEK 15	**MODULE 3** **AIR TRAFFIC CONTROL** TLO 3 TLO 4	MLO 1. Discuss the Air Traffic Control as a service provided by ground-based controllers who direct aircraft on the ground and in the air. MLO 2. Describe the Air Traffic Control Tower (ATCT) as a tall, windowed structure located on the airport grounds. MLO 3. Describe the Air Traffic Controllers as the people who expedite and maintain a safe and orderly flow of air traffic in the global air traffic control system.	• Discussion on Air Traffic Control • Readings and discussion on Air Traffic Control Tower (ATCT) • Discussion on Air Traffic Controllers • Recitation	Power point Presentation PDF	Formative Assessment: Quiz/Research	1.54
WEEKS 16-17	**MODULE 4** **FLIGHT SERVICE STATION, SEPARATION & CONFLICTS** TLO 3 TLO 4	MLO 1. Discuss the Flight Service Station (FSS) as an air traffic facility that provides information and services to aircraft pilots before, during, and after flights, but unlike air traffic control (ATC), is not responsible for giving	• Readings and discussion on Separation (Air Traffic Control) • Discussion on Conflicts • Short quiz	Power point Presentation PDF	Formative Assessment: Quiz/Research	3.08

		instructions or clearances or providing separation. MLO 2. Describe the Separation (Air Traffic Control) as the concept of keeping an aircraft in a minimum distance from another aircraft to reduce the risk of those aircraft colliding, as well as prevent accidents due to wake turbulence. MLO 3. Describe the conflicts as an event in which two or more aircraft experience a loss of minimum separation.				
WEEK 18	**FINAL EXAMINATION**					

GRADING SYSTEM:

CRITERIA	PERCENTAGE
Major Exams/Major Performance Task Output	**30%**
Quizzes/Formative Assessment	**20%**
Class participation (Performance Tasks, Seatwork, Research)	**25%**
Modular Activities (Enrichment Activity)	**25%**
Total	**100%**

SEMESTER GRADE= (Prelim Grade + Midterm Grade+ Final Grade)/ 3

COURSE POLICIES (FLEXIBLE LEARNING MODALITY)

1. Attending to scheduled online meetings are not mandatory. Your attendance is demonstrated through contributing to course discussions and/or assignments. Completion of the Learning Modules are mandatory including submissions of performance tasks embedded in the self-directed modules. Prompt submissions of required tasks are highly encouraged.
2. The participation of the students during the online educational system are very much encourage in order to have an effective interaction between Instructor and Students.
3. Students are expected to display the highest degree of honesty and professionalism in their class work, requirements and activities especially that the flexible modality offers greater opportunity for cheating.
4. Any complaints, problems, issues, and/or concerns (teaching, grades, etc.) related to our class should be properly addressed to the subject instructor for resolution. You can communicate your concern through any platform for communication such as emails, messengers, chats, SMS or during the scheduled synchronous meetings. Shall there be no mutually agreed resolution on the issue, you may seek the help of the Program Coordinator or the ICS Dean in resolving the issue with any of your subject instructor.

COURSE POLICIES (RESIDENTIAL LEARNING MODALITY)

1. Practice academic honesty at all times. Ideas, whether submitted in writing or shared in class discussions are expected to be the student's own. Students should always ensure to make a distinction between their own ideas and knowledge from information derived from sources (printed and online/or information and opinions gained directly from other people). In the case of using knowledge which is not the student's own, this must be properly acknowledged/cited.
2. Promptness and regular attendance is required. The student will not be able to have any individual/group activity and seatwork on the day that he/she is absent unless it is an emergency or a school activity with a formal excuse letter, which is to be given immediately. He/She is responsible in the monitoring of the number of his/her absences as well as missed assignments and activities. Attendance is checked at the start of the official time, you will be marked absent after 15 minutes and thereafter.
3. Students are expected to display the highest degree of honesty and professionalism in their class work, requirements and activities and in dealing with fellow students and teacher.
4. Students should be honest at all times. Cheating and plagiarism in any form are manifestations of poor academic preparation that is contrary to the objectives of PhilSCA and ICS. Anyone caught cheating will automatically have a grade of 5.0 for the subject. Refer to PhilSCA Student Manual Page 30 number 6.
5. Assignments, seatwork, projects and other output must be submitted on or before agreed-on deadline. Failure to do may result to deductions of points. (10% of grade per day)
6. Any complaints, problems, issues, and/or concerns (teaching, grades, etc.) related to our class should be properly addressed to the subject instructor for resolution. You may seek the help of the Program Coordinator or the ICS Dean in resolving the issue with any of your subject instructor.

REFERENCES:

Call number/e-provider	Materials (textbooks, references, journals, online)
387.73606698 AS3a 1997, 3013	Norman Ashford, H. P. Martin Stanford, Cliff A. Moore. (2013). Airport Operations: New York; London: McGraw-Hill.
ISBN: 978-0-07-177059-0	Richard De Neufville, Amadeo Odoni. (2013). Airport Systems Planning Design and Management: McGraw-Hill Education LLC.
ISBN 978-0-07-175024-0	Seth B. Young, Alexander T. Wells. (2011). Airport Planning and Management Sixth Edition: McGrawHill Companies, Inc.
https://www.faa.gov/regulations_policies/ handbooks_manuals/aviation/phak/media/17_phak_ch15.pdf	FAA – H – 8083 – 25B. (2016). Pilot's Handbook of Aeronautical Knowledge, Federal Aviation Administration (FAA)
ISBN: 978-0884876601	Jeppesen Sanderson. (2018). Training Products Private Pilot Manual: Jeppesen.
	Website: www.faa.gov part 139 Airport Certification and www.caap.gov Airports Classification in Philippines

Prepared by:

Mark John G. Corsino, MEAM
Instructor I

Verified/endorsed by:

Aron J. Alojado, MSIT
IT/IS Coordinator

Approved by:

Dr. Alan Lino Silverrio J. Agustin
Dean of ICS

MAPPING TABLE FOR BS AIRCRAFT MAINTENCE TECHNOLOGY

COURSE CODE: **AIS 421**
COURSE TITLE: **AIRPORT AND RAMP HANDLING PROCEDURE**
COURSE TYPE: **Lecture**
COURSE CREDITS : **3 UNITS**

Course Learning Outcomes	Program Learning Outcomes								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
1. Express the ideas on the history and development of airport and its application nowadays.	x				x	x			
2. Explains the basic and primary function of airports and its category.	x	x			x	x			
3. Identify the different structure design of an airport, facilities and equipment available on airport.	x				x	x			
4. Identify the difference between the two airport system classifications.	x					x		x	
5. Explain effectively the different types of runways and taxiways.	x			x				x	
6. Discuss the different types of runways, taxiways, airspace and their function.			x	x	x				
7. Able to differentiates the types of pavement classification number on runways and taxiways.			x	x	x			x	

8. Explains the basic and primary function of airports and its category.			x		x			x	
9. Explains the types and classes of airspace.			x		x			x	
10. Able to participate actively in full filling assigned task and develop the sense of responsibility.	x		x	x		x			x

GRADUATE ATTRIBUTES (DESCRIPTORS/INSTITUTIONAL LEARNING OUTCOMES) – PROGRAM LEARNING OUTCOME MAPPING TABLE FOR BS IN AIRCARFT MAINTENANCE TECHNOLOGY

Program Learning Outcomes	Graduate Attributes					
	G1	G2	G3	G4	G5	G6
1. Skillfully applies knowledge acquired from laboratory works, interpretation of data gathering, maintenance & repair, general engineering and social sciences courses;	x		x			x
2. Innovative; effective technicians in systems and processes in Aircraft Maintenance;	x			x	x	x
3. Work effectively and independently in multi-disciplinary and multi-cultural teams in diverse fields of practice;	x			x	x	x
4. Demonstrate skills in appropriate aviation technical applications, problem solving and critical thinking skills, diverse communication, safe work habits and behavior in aircraft maintenance;	x	x	x		x	x
5. Understand the effects and impact of the aircraft maintenance profession on the environment and the society, as well as the social and ethical responsibilities of the profession;	x	x	x	x		x

6. Engage in life-long learning and to keep current of the development in a specific field of specialization;	x	x	x			x
7. Observant and adaptive of contemporary aviation issues	x	x	x			x
8. Understand management principles as a member and as a team leader in aviation projects and in multidisciplinary environments;	x	x	x	x	x	x
9. Apply acquired aircraft maintenance knowledge and skills for national development.	x	x	x			

Aircraft Maintenance Technology Department First Semester, Academic Year 2020 – 2021

GRADUATES ATTRIBUTES AND INSTITUTIONAL LEARNING OUTCOMES (ILOs)

Graduate Attribute (GA)	Descriptors (Institutional Learning Outcome)
1. Holistic Individuals	a) Practices honesty, fairness, truth and integrity in all aspects of life (personal and professional lives) b) Observes and maintains ethical standards in dealing with the different stakeholders Manifests c) humility and respect in relating with other people
2. Creative and Critical Thinkers and Problem Solvers	a) Manifests a deep sense of nationalism by integrating history, arts, and culture in their daily lives b) Participates responsibly and collaboratively in the discussion and resolution of issues within local, national, and int'l contexts c) Engages actively in political, social, economic, and cultural transformation for nation building d) Brings pride and honor to the community and the country e) Patronizes locally produced products and promotes them globally
3. Socially Responsible	a) Demonstrates concern and compassion for the plight of the vulnerable and marginalized sectors of society by participating meaningfully in the process of social transformation b) Engages in ecological advocacies as responsible stewards of God's creation c) Continuously works in solidarity with people and institutions to effect liberating action d) Brings forth awareness and deeper understanding of social realities e) Manifests spirit of volunteerism through social actions that improve communities

4. Globally Competitive Aviation Professionals	a) Takes progressive responsibility for own learning and development b) Promotes critical and creative thinking, self-knowledge and self-mastery c) Is committed to rise above mediocrity d) Shows dedication, commitment and love for work to attain exceptional results e) Exhibits innovativeness and creativity in various contexts
5. Cooperative and Independent Leaders	a) Effectively communicates in various forms of media b) Strives to be at the top of their chosen fields c) Effectively works and collaborates in a multi-disciplinary team d) Adapts to changes in the workplace, local society and global community
6. Lifelong Learners	a) Highly motivated individuals who strive for both personal development and professional advancement through continuing education as success indicators towards improving the quality of life and the society.