

COLLEGE OF NURSING

Carlatan, San Fernando City, La Union

PHILOSOPHY

We believe in student centered approach to education and management.

We believe in achieving a lot with limited resources by knowing what other institutions are doing, adopting or improving and using that can be applied to the College.

We believe that a strong continuing faculty and staff development program in the college is a vital component of the total effort to attain the main goal of the College.

We believe in the stability and strength as a base for achieving quality education, relevant to national means and development of the total person.

We believe above all that giving honor and glory to God in everything we do, is most important in all official activities of the college.

VISION

We envision Lorma Colleges as an educational institution with a global perspective emphasizing quality, Christian values, and leadership skills relevant to national development.

MISSION

To empower students for service anywhere in the world through Christian-inspired, quality-driven, and service-oriented education and training.

INSTITUTIONAL GRADUATE ATTRIBUTES		INSTITUTIONAL OUTCOMES
GOD FEARING	101	Internalize the Christian values
	102	Model the Christian values in their personal and professional lives.
DECISION MAKER, CRITICAL AND CREATIVE THINKER	103	Generate ideas and insights utilizing appropriate judgment in decision making.
	104	Utilize higher order thinking skills in decision-making towards innovation and creating new technologies
	105	Apply innovative methods and new technologies to solve different problems and making decisions
		effectively
EFFECTIVE COMMUNICATOR	106	Communicate effectively ideas or knowledge through listening, speaking, reading, writing using
		culturally appropriate language.
SERVICE-DRIVEN CITIZEN	107	Imbibe the service-orientedness to oneself, to oneself, to one's profession and towards the community.
REFLECTIVE LIFELONG LEARNER	108	Commitment to continuously upgrade one's education through readings, seminars, and trainings
COMPETENT PROFESSIONAL	109	Perform exceptional knowledge, skills and right attitude in accomplishing duties and responsibilities
		beyond acceptable standards.

	NURSING PROGRAM OUTCOMES	INSTITUTIONAL	VISION	MISSION	PHILOSOPHY
Aft	er 4 years, the Lorma graduate will:	OUTCOMES			
1	Execute professional and social competence in the fields of specialization in accordance to national				
	and international standards. More specifically, the Lorma graduate will be able to:				
	1.1 apply knowledge of physical, social, natural and health sciences and humanities in the practice of	IO1; IO9	✓	✓	✓
	nursing;				
	1.2 provide safe, appropriate, and holistic care to individuals, families, population group and	103; 104; 107; 109	✓	✓	✓
	community utilizing nursing process;				
	1.3 apply guidelines and principles of evidence-based practice in the delivery of care;	105; 108; 109	\checkmark	\checkmark	\checkmark
	1.4 communicate effectively in speaking writing and presenting using culturally appropriate language;	106	✓	✓	✓
	1.5 document to include reporting up-to-date client care accurately and comprehensively;	109	\checkmark	\checkmark	\checkmark
	1.6 work effectively in collaboration with inter, intra, and multi-disciplinary and multi-cultural teams;	105; 109	✓	✓	✓
	1.7 practice beginning management and leadership skills in the delivery of client care using a systems	105	\checkmark	\checkmark	✓
	approach;				
	1.8 conduct research with an experienced researcher; and	105; 109	✓	\checkmark	\checkmark

	1.9 apply techno-intelligent care systems and processes in health care delivery.	104; 105; 109	✓	\checkmark	✓
2	Develop high level of comprehension for decision-making and critical thinking through continuous educational advancement necessary to personal and professional empowerment. In particular, the Lorma graduate will be able to:				
	2.1 engage in lifelong learning with a passion to keep current with national and global developments in general, and nursing and health developments in particular; and	103; 104; 108	✓	\checkmark	~
	2.2 apply entrepreneurial skills in the delivery of nursing care.	104; 105	✓	\checkmark	\checkmark
3	Exemplify Cristian values, legal, and ethico-moral principles in serving individual clientele in various cross-cultural settings. Purposely, the Lorma graduate will be able to:				
	3.1 practice nursing in accordance with existing laws, legal, ethical, and moral principles;	101; 102	✓	\checkmark	✓
	3.2 demonstrate responsible citizenship and pride of being a Lorma graduate; and	102	✓	\checkmark	✓
	3.3 adopt the nursing core values in the practice of the profession.	101; 102; 109	✓	\checkmark	\checkmark

COURSE SYLLABUS

1. C	OURSE NUMBER	:	MC 2 / MC 2L
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- 2. COURSE TITLE : BIOCHEMISTRY
- 3. PRE REQUISITE
- 4. CO REQUISITE
- 5. COURSE CREDIT

- 3 Units Lecture, 2 Unit Laboratory
- 6. CONTACT HOURS/SEMESTER : 3 Hours per Week /6 Hours per Week

N/A

N/A

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7. COURSE DESCRIPTION

Biochemistry is designed to assist the students to acquire knowledge of the biochemical composition and functioning of human body and understand the alterations in biochemistry in disease for practice of nursing. This course will provide students of nursing and other health care professions with vital biochemistry information that will enable them to carry out their duties in an informed, safe, and efficient manner.

8. LEVEL OUTCOMES AND RELATIONSHIP TO PROGRAM OUTCOME

	LEVEL 1 OUTCOMES NURSING PROGRAM OUTCOMES									
At the	end of first year, the Lorma learners, given simulated situations in clinical/community settings, the learners will	1	2	3						
demo	nstrate the basic nursing skills in rendering safe and appropriate care utilizing the nursing process.									
1	Apply knowledge of principles and concepts of relevant sciences about biochemistry.	✓	\checkmark	✓						
2	Utilize the nursing process in providing safe, humane, appropriate, and holistic care to clients.		✓	\checkmark						
3	Discuss theories and models in nursing as applied in client care.		\checkmark	\checkmark						
4	Integrate research findings in the delivery of nursing process.		~	\checkmark						
5	Justify the value of evidence-based practice in nursing.	✓	\checkmark	\checkmark						
6	Apply ethico-legal and moral principles in professional decision – making.	\checkmark	~	\checkmark						
7	Communicate effectively in writing, speaking, and presenting using culturally appropriate language.		\checkmark	\checkmark						
8	Exhibit beginning skills in collaborating with inter-, intra- and multidisciplinary and multicultural teams.	\checkmark	~	\checkmark						
9	Display behavior of an independent learner who is critical, creative, and focused.	~	\checkmark	\checkmark						
10	Exhibit enhancing qualities as a responsible citizen and as a Filipino.	✓	\checkmark	\checkmark						

9. COURSE OUTCOMES AND RELATIONSHIP TO LEVEL OUTCOMES

	Course Outcomes				Level Outcomes							
At the	e end of the course, the student should be able to:	rse, the student should be able to: 1 2 3 4 5 6 7 8 9						9	10			
1	Define terms related to biochemistry.	I	I	I	Р	Р	Р	Р	Р	D		
2	Appreciate the scope of biochemistry and its central role in the life sciences and that biochemistry and nursing are intimately related discipline.	I	I	I	I	Ρ	Р	Р	Р	Р	D	
3	Integrates knowledge chemical processes in living cells with strategies to maintain health, understand disease, identify potential therapies, and enhance understanding of the origins of life on earth.	Ι	I	I	I	Ρ	Ρ	Р	Р	Р	D	
4	Compare and contrast the structure and composition of cell	I	I	I	I	Р	Р	Р	Р	Р	D	
5	Ascertain the cellular organization of prokaryotic and eukaryotic cell	I	I	I	I	Р	Р	Р	Р	Р	D	
6	Explain Transport mechanism Across the plasma membrane:	Ι	Ι	Ι	Ι	Р	Р	Р	Р	Р	D	
7	Differentiate diffusion to osmosis.	Ι	Ι	Ι	Ι	Р	Р	Р	Р	Р	D	
8	Identify the component of acid-base balance: blood, pH, buffering and diagnosis	I	I	I	I	Р	Р	Р	Р	Р	D	

9	Explain water electrolyte balance and imbalance	I	I	I	I	Р	Р	Р	Р	Р	D
10	Classify the different types of carbohydrates	I	I	I	I	Р	Р	Р	Р	Р	D
11	Identify the qualitative test for carbohydrates.	I	I	I	I	Р	Р	Р	Р	Р	D
12	Differentiate the ten categories of metabolic pathways.	I	I	I	I	Р	Р	Р	Р	Р	D
13	Analyze the regulation of glucose in the blood.	I	I	I	I	Р	Р	Р	Р	Р	D
14	Discuss the carbohydrate metabolic disorder and diseases.	I	I	I	I	Р	Р	Р	Р	Р	D
15	Explain carbohydrate metabolism.	I	I	I	I	Р	Р	Р	Р	Р	D
16	Explain glycemic index of carbohydrates	I	I	I	I	Р	Р	Р	Р	Р	D
17	Identify the carbohydrate metabolic disorder and diseases	I	I	I	I	Р	Р	Р	Р	Р	D
18	Define simple and complex lipids and identify the lipid classes in each	I	I	I	I	Р	Р	Р	Р	Р	D
	group.										
19	Apply qualitative test of Lipids	I	I	I	I	Р	Р	Р	Р	Р	D
20	Explain the metabolism of fatty acids and triacylglycerol	I	I	I	I	Р	Р	Р	Р	Р	D
21	Determine lipoproteins and its functions	I	I	I	I	Р	Р	Р	Р	Р	D
22	Identify types. structure, composition and uses of amino acids and	I	I	I	I	Р	Р	Р	Р	Р	D
	proteins										
23	Expound Metabolism of Amino Acids, Proteins and Nitrogen	Ι	I	I	I	Р	Р	Р	Р	Р	D
24	Recognize factors affecting enzymes catalysis	Ι	I	I	I	Р	Р	Р	Р	Р	D
25	Differentiate co-factors, coenzymes and isoenzymes.	I	I	I	I	Р	Р	Р	Р	Р	D
26	Discuss functions of enzymes	I	I	I	I	Р	Р	Р	Р	Р	D
27	Determine structures, and classification of vitamins and minerals	I	I	I	I	Р	Р	Р	Р	Р	D
28	Explicate vitamin and minerals absorption, storage and transportation	Ι	I	I	I	Р	Р	Р	Р	Р	D
29	Determine normal concentration, investigation and interpretation of	I	I	I	I	Р	Р	Р	Р	Р	D
	vitamins and minerals										
30	Identify and explain the composition of metabolism of nucleic acid and	I	I	I	I	Р	Р	Р	Р	Р	D
	nucleotides										
31	Identify nucleic acid structures (DNA and RNA)	Ι	I	I	I	Р	Р	Р	Р	Р	D
32	Define the different terminologies related to immunochemistry	Ι	I	I	I	Р	Р	Р	Р	Р	D
33	Explain immune response of the body	Ι	I	I	I	Р	Р	Р	Р	Р	D
34	Identify structures and classifications of Immunoglobulin	1		1		Р	Р	Р	Р	Р	D
35	Explain the mechanisms of antibody production	Ι	I	I	I	Р	Р	Р	Р	Р	D
36	Determine HLA typing	Ι	I	I	I	Р	Р	Р	Р	Р	D
37	Differentiate free radicals to antioxidants	Ι		Ι		Р	Р	Р	Р	Р	D

38	Identify the different specialized proteins	I	I	I	I	Р	Р	Р	Р	Р	D
39	Determine Electrophoretic and Quantitative determination of	I	I	I	I	Р	Р	Р	Р	Р	D
	Immunoglobulins										
40	Recognize the action, effects and functions of hormones	I	I	I	I	Р	Р	Р	Р	Р	D
41	Explain the biochemical and physiological effects of hormones.	I	I	I	I	Р	Р	Р	Р	Р	D
42	Understand clinical biochemistry	I	I	I	I	Р	Р	Р	Р	Р	D
43	Explain the biochemistry of aging.	I	I	I	I	Р	Р	Р	Р	Р	D

• Legend: I – Introduced; P – Performed with supervision; D – Demonstrated

10. COURSE COVERAGE

			Teaching Learning Strategies Assessment Tasks				Course
				Lecture	Laboratory		Outcomes
Week	Day	CLASSROOM TOPICS		LOLS: Lorma Colle	ge of Nursing Online L	earning System	
			Learning Resources	Lec: 1 hour synchrono	us session; 2 hours as	ynchronous sessions	
				Lab: 2 hours synchrone	ous session; 4 hours as	synchronous sessions	
1	1-2	Orientation	Student Handbook and other school policies	Introduction via google meet	1 minute introduction via	Open Forum	CO1, CO2, CO3, CO4,
		I. Introduction: Composition and Function of Cell	Rodwell Victor W., Botham Kathleen M., Kennely Peter J.	Lecture-Discussion via	Google meet Lecture Discussion	Assignment Oral Group Reporting	CO5,
	3	 A. Introduction , Pioneers and Importance of Biochemistry B. Structure, Composition and Function of Cell C. Cellular Organization: Prokaryotic and Eukaryotic Cell D. Transport Mechanism Across Plasma Membrane 	Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31 st Edition. The McGraw-Hill Education. The Cell https://www.youtube.com/wa tch?v=BjvM6gDTQtw&t=67s https://www.youtube.com/wa tch?v=Re5SdfpUp8s&t=28s	Google Meet	on safety rules in the biochem lab via Google Meet Activity 1: Familiarization with the equipment In biochemistry laboratory Activity 2:	on assigned topic Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch	

		Transport Membrane Part 1 and 2 https://www.youtube.com/wa tch?v=16-llzaK0WI&t=54s https://www.youtube.com/wa tch?v=cel_rEkrwjM		Subcellular Organelles Activity 3 Transport Membrane	Biochemistry Lab Safety Precautions https://www.youtub e.com/watch?v=FKsa miHIBF8&t=1135s	
2	II. Biochemistry of Water and Electrolytes A. Introduction B. Biomedical importance of water and electrolytes C. Types of IV fluids and Clinical Significance	Rodwell Victor W., Botham Kathleen M., Kennely Peter J.Weil P Anthony. (2015), Harper's Illustrated Biochemistry 31st Edition. The McGraw-Hill Education.Water Part 1 and 2https://www.youtube.com/w atch?v=qDsSed6ADCc&t=48shttps://www.youtube.com/w atch?v=KNAax4HnPrE&t=42sWater and Electrolytes https://doctorlib.info/medical /biochemistry/26.htmlhttps://www.youtube.com/wa tch?v=HzRJisvdwMA	Lecture-Discussion via Google Meet	Lecture-Discussion via Google Meet Activity 4 Water and Electrolytes	Group Assignment: Reporting Teacher-designed Feedback – Recitations/Quiz Via Testmoz Accomplishment of laboratory worksheet	CO8, CO9

3		 III. Biochemistry of Acids and Bases, pH A. Introduction B. Difference between Acids and base C. Properties of Acids and Base D. Acids-Base Buffer E. Acid-Base Balance 	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2015), Harper's Illustrated Biochemistry 31st Edition. The McGraw-Hill Education Biochemistry of acids and bases Part 1 and 2 https://www.youtube.com/wa tch?v=gswdigffINQ https://www.youtube.com/wa tch?v=tX2RsIb4SKc	Lecture-Discussion via Google Meet	Lecture-Discussion via Google Meet Activity 5 Acids and Bases, pH	Oral Group Reporting on assigned topic Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch Teacher-designed Feedback – Recitations & Quiz via	
4	2-3	 IV. Biochemistry of Carbohydrates A. Introduction to carbohydrates B. Classification of Carbohydrates C. Metabolic Pathways 	RodwellVictorW., BothamKathleenM., KennelyPeterJ.WeilPAnthony.(2018),Harper'sIllustratedBiochemistry31st Edition. TheMcGraw-HillEducation.BiochemistryofCarbohydratesPart 1 and 2https://www.youtube.com/watch?v=-F3xu_KQtbc&t=238shttps://www.youtube.com/wa	Lecture-Discussion via Google Meet Video clips on Metabolic Pathways	Lecture-Discussion via Google Meet Feedback quiz via testmoz Activity 6 Biochemistry of Carbohydrates	Oral Group Reporting on assigned topic Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch Teacher-designed Feedback – Recitations & Quiz	CO10, CO11,

			tch?v=BYDRbkcUEDY&t=141s			via testmoz	
5	1-3	 D. Carbohydrate metabolism E. Regulation of Blood Glucose F.Investigations and their interpretation G. Carbohydrate Metabolic disorder and diseases 	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31st Edition. The McGraw-Hill Education. Concept of Metabolism https://www.youtube.com/wa	Lecture-Discussion via Google Meet Concept Map power presentation Video clips on Pathways	Activity 7 Blood glucose test	Oral Group Reporting on assigned topic Advanced Reading/Making an Outline Accomplishment of Iaboratory worksheet	CO12, CO13, CO14 CO15, C016, CO17
6			Carbohydrate Metabolism https://www.youtube.com/wa tch?v=VzAjOPzUIP4&t=136s	EXAMINATION			
7	1-3	V. Biochemistry of Lipids	Rodwell Victor W., Botham	Lecture-Discussion via	Lecture-Discussion	Group Video	CO18. CO19.
		 A. Introduction B. Classification of Lipids C. Lipid Metabolism D. Lipoproteins and their 	Kathleen M., Kennely Peter J.Weil P Anthony. (2018),Harper'sBiochemistry 31st Edition. The	Google Meet	via Google Meet	Presentation on assigned topic Advanced	,
		Functions E. Lipid Disorders	McGraw-Hill Education. Biochemistry of Lipids Part 1 and 2	Video clips Power Point presentation	Activity 8	Reading/Making an Outline Accomplishment of Jaboratory worksheet	
		Chemistry of Lipids https://www.lecturio.com/magazine/l ipids/	https://www.youtube.com/wa tch?v=T4cL3tcvr5w https://www.youtube.com/wa tch?v=lk_WrUtVfkA		Biochemistry of Lipids	Video Watch Teacher-designed Feedback –	

						Recitations & Quiz	
						via	
8	1-3	VI. Biochemistry of Amino Acids and Proteins A. Introduction	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018),	Lecture-Discussion via Google Meet	Lecture-Discussion via Google Meet	Group Video Presentation on assigned topic	CO22
		 B. Biomedical Importance of proteins C. Types, structure, composition and uses of amino acids and proteins 	Biochemistry 31 st Edition. The McGraw-Hill Education.	Power Point presentation	Activity 8 Protein Structures	Advanced Reading/Making an Outline	
	3	D. Metabolism of Amino Acids and Proteins	Biochemistry of Amino Acids https://www.youtube.com/wa tch?v=8qVpWzQnMJk	Reporting Lecture-Discussion via Google Meet		Accomplishment of laboratory worksheet	
			Proteins Part 1 and 2			Video Watch	
			https://www.youtube.com/wa tch?v=cQ0DGSjiz60			Teacher-designed Feedback –	
			https://www.youtube.com/wa tch?v=rFvFXa_zWxM			via	
			Protein Metabolism Part 1 and 2				
			https://www.youtube.com/wa tch?v=iv6C4RrxEBg				
			https://www.youtube.com/wa tch?v=K8gpPub1d2A				
9	1	VII. Biochemistry of Enzymes and their nature A. Structures and Functions of	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018),	Interactive Discussion	Perform Lab Activity	Group Video Presentation on	CO24, CO25, CO26

		Enzymes B. Classifications of Enzymes C. Clinical Significance of Plasma enzymes Concentrations D. Enzymes in Clinical Diagnosis	Harper'sIllustratedBiochemistry 31st Edition. TheMcGraw-Hill Education.Biochemistry of Enzymes Part1 and 2	Video clips Reporting	Activity 9 Enzyme Action	assigned topic Advanced Reading/Making an Outline Accomplishment of	
			https://www.youtube.com/wa tch?v=1ItMeL4htaA https://www.youtube.com/wa			laboratory worksheet Video Watch	
			tch ?v=4qg0Md3l5xw			Teacher-designed Feedback – Recitations & Quiz via testmoz	
10	1-3	 VIII. Biochemistry of Vitamins and Minerals A. Introduction B. Biomedical Importance of Vitamins and Minerals C. Classification of Vitamins and Minerals D. Properties, Absorption, Storage and transportation of vitamins and Minerals 	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31st Edition. The McGraw-Hill Education. Biochemistry of Vitamins file:///D:/2021Desktop%202/B IOCHEMISTRY%202021/BIOCH EMISTRY%20LABORATORY/20 21%20Laboratory%20Lecture/ biochemistry-of-vitamins.pdf	Interactive Discussion Power point Presentation Video clips	Perform Lab Activity Activity 10 Vitamin D Synthesis	Group Video Presentation on assigned topic Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch Teacher-designed Feedback – Recitations & Quiz	CO27, CO28, CO29

						via testmoz	
11	1-3	 IX. Biochemistry of Nucleic Acid and Nucleotides A. Introduction B. Structure of nucleic acid C. Structure of DNA and RNA 	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31 th Edition. The McGraw-Hill Education. Nucleic acid : DNA & RNA https://www.youtube.com/wa tch?v=6NhDY3IDp00	Lecture-Discussion via Google Meet Video Clips Reporting	Perform Lab Activity Activity 11 : Nucleic acids	Group Video Presentation on assigned topic Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch Teacher-designed Feedback – Recitations & Quiz via testmoz	CO30, CO31
12			MID	TERM EXAMINATION			
13	1-3	 X. Immunochemistry a. Introduction b. Immune Response c. Structure and Classification of Immunglobulins d. Mechanism of Antibody production 	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31st Edition. The McGraw-Hill Education. Immunochemistry Part 1 and 2 https://www.youtube.com/wa tch?v=GQjIAFUC2X4	Lecture-Discussion via Google Meet Video Clips Reporting Flipped Video	Perform Lab Activity Activity 12 Immunochemistry	Group Assignment Medical Flyers on assigned topic Advanced Reading/Making an Outline Accomplishment of laboratory worksheet	CO32, CO33, CO34, CO35

			https://www.youtube.com/wa tch?v=1wn-irLCzTk			Video Watch Teacher-designed Feedback – Recitations & Quiz via testmoz	
14	1-3	 e. Antigens: HLA typing f. Free radical and Antioxidants g. Specialized Proteins: Collagen, Elastin, Keratin, Myosin, Lens Protein h. Electrophoretic and Quantitative determination of Immunoglobulins ✓ Investigation and their interpretations 	 Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31th Edition. The McGraw- Hill Education. 	Lecture-Discussion via Google Meet Word Wall Identify the Big Idea	Perform Lab Activity Activity 13 Immunoglobulins	Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch Teacher-designed Feedback – Recitations & Quiz via testmoz	CO36, CO37, CO38, CO39
15	1-2	 XI. Hormones: From Action in the cell to Function in The body A. Endocrine hormones B. Action, effects and function of hormones C. The biohemical and physiological effects of a hormone 	Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31st Edition. The McGraw-Hill Education. Hormone Biochemistry https://www.youtube.com/wa tch?v=MHOpVy8VcXk&t=148s https://www.youtube.com/wa tch?v=GQ56QoYE1aQ	Lecture-Discussion via Google Meet Video Clips Reporting	Perform Lab Activity Activity 14 Understanding Immune System	Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch Teacher-designed Feedback – Recitations & Quiz via testmoz	CO40, CO41,

171-3XIII. Biochemistry of Aging A. Introduction B. Concepts of Aging C. Theories of Aging D. Factors of AgingNewsholme, Eric A. Leech Tony R. Functional Biochemistry in Health and Disease 3 nd Edition. John Wilet & Sons. LtdLecture-Discussion via Google MeetPerform Lab ActivityAdvanced Reading/Making an OutlineCO4171-3XIII. Biochemistry of Aging B. Concepts of Aging D. Factors of AgingNewsholme, Eric A. Leech Tony R. Functional Biochemistry in Health and Disease 3 nd Edition. John Wilet & Sons. LtdLecture-Discussion via Google MeetPerform Lab ActivityAdvanced Reading/Making an OutlineCO4171-317171718191019101010		1-5	A. Introduction B. Specimen tested in clinical analysis	Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31st Edition. The McGraw-Hill Education. Clinical Biochemistry https://www.youtube.com/wa tch?v=noeBTb0YLfs	Google Meet Video Clips Reporting	Activity Activity 17 Clinical Chemistry	Medical Flyers on assigned topic Advanced Reading/Making an Outline Accomplishment of laboratory worksheet Video Watch Teacher-designed Feedback – Recitations & Quiz via testmoz	
	17	1-3	XIII. Biochemistry of Aging A. Introduction B. Concepts of Aging C. Theories of Aging D. Factors of Aging	Newsholme, Eric A. Leech Tony R. Functional Biochemistry in Health and Disease 3 nd Edition. John Wilet & Sons. Ltd https://www.slideshare.net/s hanzayannum/biochemistry- of-aging	Lecture-Discussion via Google Meet Video Clips Reporting	Perform Lab Activity Activity 18 Biochemistry of Aging	Advanced Reading/Making an Outline Individual Essay Accomplishment of laboratory exercise Video Watch Teacher-designed Feedback – Recitations & Quiz via testmoz	CO47

11. SUGGESTED READINGS AND REFERENCES

• TEXTBOOK:

• Rodwell Victor W., Botham Kathleen M., Kennely Peter J. Weil P Anthony. (2018), Harper's Illustrated Biochemistry 31th Edition. The McGraw-Hill Education.

- Lehninger Principles of Biochemistry/ D. Nelson and M. Cox
- o DM Vasudevan, Sreekumari S. Kannan Vaiyanathan, Textbook of Biochemistry for Medical Students, 9th Edition. Jaypee Brothers Medical Publishers(P)LTD

12. COURSE EVALUATION

COURSE REQUIREMENT	Total Weight (%)	COURSE REQUIREMENT	Total Weight (%)
(Lecture Component)		(Lab Component)	
A. Term Grade		A. Term Grade	
1. Class Standing	66.67% (2/3)		
Attendance (5%)		1. Class Standing	80%
Note: 1) 100% for complete attendance, decrement of		Attendance (5%)	
1% for every 1 day unexcused absent 2) 3 accumulated		Note: 1) 6/6 for every synchronous session	
late is equivalent to 1 day absent.		Deduction of 1/6 for every absence on	
 Recitation and Other Assessment Tasks (15%) 		synchronous session	
Note: 1) 5 points minimum, increment of 1 for every		2) 3 accumulated late is equivalent to 1	
correct answer made by the student (10 points		day absent.	
maximum). 2) For other assessment tasks, a standard		 Recitation and Other Assessment Tasks 	
rubric or pointing system will be followed as agreed upon		(15%)	
the nursing faculty.		Note: 1) 5 points minimum, increment of 1	
• Quizzes (46.67%)		for every correct answer made by the	
Transmutation Formula = Total Score X 60% + 40%		student (10 points maximum). 2) For other	
Total # of Items		assessment tasks, a standard rubric or	
		pointing system will be followed as agreed	
		upon the nursing faculty.	
		• Quizzes (46.67%)	
		Transmutation Formula = Total Score X 60% +	
		40%	
		Total # of Items	

		 Rotation Grade 1 + Rotation Grade 2 + Rotation Grade 3Rotation Grade n / 3 (# of Grades) 	
2. Term Examination	33.33% (1/3)	2. Term Examination	20%
TOTAL	100%	TOTAL	100%
B. Final Final Grade		B. Final Final Grade	
1. Preliminary Grade	30%	a. Preliminary Grade	30%
2. Midterm Grade	30%	b. Midterm Grade	30%
3. Final Grade	40%	c. Final Grade	40%
TOTAL	100%	TOTAL	100%
 NOTE: For professional nursing subjects the final final grade is computed as follows: 80% of the Tentative Final Final Grade (Prelim+Midterm+Final) + 20% of the Comprehensive Exam 			

13. CLASSROOM POLICIES (as per Student Handbook)

A. Professional Decorum (pg. 15)

Student of Lorma Colleges' College of Nursing are expected to behave properly at all times especially if in the school premises. The guidelines are as follows:

- 1. Courteously knock on every door before entering any room, wait for acknowledgment then introduce self.
- 2. Maintain a moderate tone voice anywhere especially along the corridors, classrooms and patient's room.
- 3. Greet patients, relatives, teachers, employees and peers as you meet them.
- 4. Friendliness is encouraged but always maintains professionalism since too much familiarity may compromise the respect for each other.
- 5. Confidentiality on patient's information should be observed.
- 6. Practice and maintain good posture at all times.
- 7. Students are not allowed to go out of the hospital compound for their snacks/meals.
- 8. Bringing in prepared foods should only be eaten at the designated places.
- 9. Allowed time for snacks is 15 minutes and 30 minutes for mealtime in any given shift.
- 10. Students must observe humility, tactfulness and respect when dealing with others. Always observe the Code of Ethics for Nurses and practice the Golden Rule in everyday life.

- 11. Students must wear the prescribed uniform at all times with dignity and respect and should be worn only in the school and hospital premises.
- 12. Students are not allowed to entertain visitors while on duty. Should an emergency occur where an immediate member of the family is involved, permission from the clinical instructor must be sought first and accomplish a hospital visitation form.
- 13. Gambling, smoking and drinking of alcoholic beverages and drug use are strictly prohibited.
- 14. In case of emergency, the unit's telephone may be used with permission from the staff and the Clinical Instructor. Otherwise, use of the unit's telephone is not allowed.
- 15. Promptness at all times, in all occasions and in any setting must be observed.
- 16. Students must strictly adhere to the hospital/community/school policies, rules and regulations.
- 17. Students should not loiter around while in school premises. These preceding guidelines professional decorum are not limited to as written. Other guidelines for social norms and general behavior are written in the Lorma Colleges' Student Handbook and must strictly observe.

B. Classroom (pg. 16)

1. The students are required to wear the prescribed college uniform in the given day.

Monday/Thursday – institutional uniform with blue slacks

Tuesday/Friday – clinical uniform (without apron for females) with black shoes

Wednesday/Saturday - clinical uniform (without apron for females) with black shoes

2. The students should strictly comply with the policies stated above, in terms of punctuality, attendance, compliance to the requirements, etc.

- 3. Every semester, there are three major examinations, namely Prelims, Midterms and Final Examinations.
- 4. Any forms of misconduct like cheating, behaviors, etc. will be subjected to disciplinary action.

NOTE: Students are advised to read the student handbook from pages 8 – 20. Any amendments to the student handbook and/or new issued policies, rules and regulations the administration and the college deemed necessary, shall be applied automatically to the student/s currently enrolled in the college.

2. CONSULTATION HOURS

Name of Instructor	Day	Time
Merlita Avecilla MAN		
Cherry Sharon Catli MAN	THF	9:00-10:30
Helen Lubiano MAN		
Rhoda Navor MAN		
Fe Nisperos MAN	MT	9:00-10:30

Maria Rosario Soriano, MAN	
Mariflor Ocampo, MSN	

Course Title	Date Effective	Date Revis	Prepared by	Reviewed by	Noted by	Recommending Approval	Approved by	Page 17 of
		ed						17
			Cherry Sharon Catli MAN					
Bio	1st	August	Fe Nisperos MAN	Jovelyn Ayang-ang MAN	Teresita A. Ferrer, MAN	Marites C. Pagdilao,	Pacita G. Apilado, EdD	
chemistry	Semester,	2021		Head, Level 1	Assistant Dean for	MAN, MPA	Executive Director of	
	SY 2021 –		Merlita Avecilla MAN		Academics	Dean, CON	Academic Affairs	
	2022							
			Helen Lubiano MAN					
	September- December 2021		Rhoda Navor MAN					
			Maria Rosario Soriano MAN					
			Mariflor Ocampo MAN					