





Department of Pure and Applied Chemistry

Visca, Baybay City, Leyte, PHILIPPINES Telefax: +635637747 Email: dopac@vsu.edu.ph

Website: www.vsu.edu.ph

OUTCOMES-BASED EDUCATION (OBE) COURSE SYLLABUS

Chem121n Organic Molecules

UNIVERSITY INFORMATION

Vision of the University

A globally competitive university for science, technology, and environmental conservation

Mission of the University

Development of a highly competitive human resource, cutting-edge scientific knowledge and innovative technologies for sustainable communities and environment.

3. VSU Quality Policy Statement

The Visayas State University (VSU), a globally competitive university of science and technology and environmental conservation, is created by law to develop highly competitive human resource, cutting- edge scientific knowledge and innovative technologies for sustainable communities and environment

Towards this end, we, at the Visayas State University, commit to:

- Produce highly competent, quality and world-class manpower in science and technology, especially for agriculture, environmental management and industry who are proficient in communication skills, critical thinking and analytical abilities;
- Generate and disseminate relevant knowledge and technologies that lead to improved productivity, profitability and sustainability in agriculture, environment and industry; and
- Satisfy the needs and applicable requirements of the industry, the community and government sectors who are in need of quality graduates and technology ready for commercialization through the establishment, operation, maintenance and continual improvement of a Quality Management System (QMS) which is aligned with the requirements of ISO 9001:2015.

It shall be the policy of the university that the quality policies and procedures are communicated to and understood by all faculty, staff, students and other stakeholders and that the system be continually improved for its relevance and effectiveness.

> President 0 07-16-2019

4. Quality Goals of the College of Arts and Sciences

- a. To produce quality manpower and graduates in biology, biotechnology, chemistry, English, liberal arts and behavioral sciences, mathematics, physics and statistics to serve the development needs of the region.
- To uplift the economic well-being of the region through relevant R and D and extension programs.
- c. Enhance regional development of the Visayas for regional competitiveness.

5. Quality Objectives of the Department of Pure and Applied Chemistry

- a. Produce highly qualified and skilled Chemists and Chemical technicians for the industry and the academia.
- Generate relevant knowledge and technologies through basic and applied multi- and inter-disciplinary researches.
- Achieve strong linkages and cooperation with domestic and international institutions and agencies involved in the pursuit of sustainable development.

II. PROGRAM INFORMATION

| 1. | Name of the Program | Bachelor of Science in Biology | |
|----|---------------------|--------------------------------|--|
| 2. | CHED CMO Reference | CMO no.49 Series of 2017 | |
| 3. | BOR Approval | BOR Resolution No. 64 s. 2018 | |

4. Program Educational Objectives and Relationship to Institution Mission

| | where scientists with biological expertise are needed | N | <i>Aissio</i> | n* |
|----|---|---|---------------|----|
| | Program Educational Objectives | a | b | C |
| | Can be employed in government/private institutions and other agencies where scientists with biological expertise are needed | 1 | ٧ | 4 |
| 2. | Can engage in entrepreneurial activities | V | 1 | V |
| 3. | Conduct research in the various areas of biology | V | 1 | V |
| 4. | Undertake post graduate education in Biology and allied fields | 1 | 1 | N |
| | Pursue a career in teaching | N | V | N |

^{*}a - development of a highly competitive human resource, b - cutting-edge scientific knowledge, c - innovative technologies for sustainable communities and environment

III. COURSE INFORMATION

| 1. Course Code | Chem 121n |
|-----------------------|--|
| 2. Course Title | Organic Molecules |
| 3. Pre-requisite | HS Chemistry |
| 4. Co-requisite | 121.1 Organic Molecules Laboratory |
| 5. Credit | 2 units |
| 6. Semester Offered | 1st semester of 2nd year |
| 7. Number of hours | 2 hrs / week |
| 8. Course Description | This course provides a fundamental understanding of organic molecules and their reactivity. It explains the relationship between molecular structure and the type of reactions organic molecules undergo. The chemistry of organic compounds is discussed according to their functional groups, subsequently their practical applications in the modern world. |

| Pr | Program Outcomes (POs) in relation to the Program Educ ogram Outcomes (POs) | | Program Educational Objectives | | | | | | |
|----|--|---|-----------------------------------|---|-----|---|--|--|--|
| _ | | 1 | 2 | 3 | 4 | 5 | | | |
| а | Articulate the latest developments in their specific fields of practice | 1 | 1 | 1 | 1 | 1 | | | |
| b | Effectively communicate orally and in writing using both English/Filipino language | 1 | 1 | 1 | 1 | V | | | |
| C | Work effectively in multidisciplinary and multicultural teams | 1 | 1 | 1 | 1 | V | | | |
| d | Demonstrate professional, social, and ethical responsibility, especially in practicing intellectual property rights and sustainable development | 4 | 1 | ٧ | 1 | , | | | |
| е | Preserve and promote Filipino historical and cultural heritage based on RA 7722 | 4 | ٧ | ٧ | 1 | V | | | |
| f | Demonstrate broad and coherent knowledge and understanding of physical and natural sciences | 4 | 1 | ٧ | 1 | V | | | |
| g | Apply critical and problem-solving skills using the scientific method | 4 | 1 | ٧ | ٧ | | | | |
| h | Interpret relevant scientific data and make judgments that include reflection on scientific and ethical issues | 4 | ٧ | ٧ | 4 | , | | | |
| | Carry out basic mathematical and statistical computations and use appropriate technologies in (a) the analysis of data; (b) in pattern recognition, generalization, abstraction, critical analysis, and problem solving | 1 | 1 | 1 | 1 | | | | |
| | Communicate information, ideas, problems and solutions, both orally and in writing to other scientists, decision- makers and the public | 1 | 1 | 1 | . 1 | 1 | | | |
| (| Connect math and science to other disciplines | 1 | 1 | 1 | 1 | 1 | | | |
| | Design and perform safe and responsible techniques and procedures in the laboratory or field practice | 1 | ٧ | 4 | 4 | 1 | | | |
| m | Accepts and critically evaluates input from others | V | 1 | V | 1 | V | | | |
| n | Appreciate the limitations and implications of science in everyday life | 1 | 1 | 4 | 1 | 1 | | | |
| 0 | Commit to the integrity of data | 1 | 1 | 1 | 1 | V | | | |
| 0 | Develop an in-depth understanding of the basic principles governing the science of life | 1 | 4 | 4 | 4 | 1 | | | |
| 7 | Utilize techniques/procedures relevant to biological research work | ٧ | 1 | 1 | . 1 | 1 | | | |
| | Carry out basic mathematical and statistical computations and use of appropriate technologies in the analysis of biological data | 1 | 1 | 4 | 1 | ٧ | | | |
| s | Extend knowledge and critically assess current views and theories in various areas of biological sciences | 1 | 1 | 1 | 1 | 4 | | | |

| After completing this | | | | | | | Pro | gran | m C | utce | ome | s C | ode | | | | | | |
|--|----------------|---|---|---|---|---|-----|------|-----|------|-----|-----|-----|---|---|---|---|---|---|
| be able to perform the following COs: | a | ь | c | d | е | f | g | h | i | j | k | 1 | m | n | 0 | p | q | r | S |
| CO1 Apply the concepts of structural theory to predict the physical and chemical properties of organic compound from the simplest to more diversible biomolecules. | o d d of D | D | | | | D | E | | | | D | | | D | | E | | | |
| co2 State the unique properties of carbo such that it can form the most diverse organismolecules with itself and with other elements. | n e c D | D | | | | D | E | | | | D | | | D | | E | | | |
| CO3 Illustrate the different functional groups, the reactive sites and the type of organ reactions that can occur on these sites. | ir e D | D | | | | D | E | | | | D | | | D | | E | | | |
| CO4 Name systemical (IUPAC) the organ molecules according its functional groups a well as their commonames. | ic io is | D | | | | D | E | | | | D | | | D | | E | | | |
| | of n d | D | | | | D | E | | | | D | | | D | | D | | | |

Legend: I – Introductory, E – Enabling, D – Demonstrative
Each letter indicates the expected level of competency that each CO should provide for each
PO

| ek | | Learning | | eaching and Learning Activities | | |
|------|---|--|-------------------------------------|------------------------------------|---|--|
| Week | Topics | Outcomes | Teaching Activities | Learning Activities | Tasks | |
| Clas | ss Orientation | | | | | |
| 1 | VSU Vision Mission, and Quality Policy Statement | Explain their role in the attainment of VSU's VMGO | Online Mode: Virtual Meeting/ | Face to face discussion | Part of the Bonus in Long Exam 1 | |

| Class Policies | | Viewing of | 0.5.4 |
|---|---|--------------------------|---------------|
| Requirements | Learn where they can optimize their learning | recorded presentation: | Online Mode: |
| | process and get good | presentation. | Discussion |
| Grading System and Activities | grades | Face to Face | Google |
| 0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1 | | Classes: Q & A | Classroom |
| Submission of Requirements | | for clarification, | |
| Learning Guide | | setting of expectations, | |
| | | and getting-to- | |
| | | know-each other | |
| | | Class interaction | |
| | | Sharing of Ideas | |
| | | Feedbacks | Offline Mode: |
| | | VSUEE/VC*: | Note-taking |
| | | Familiarization | and Ebook |
| | | of the virtual | Reading |
| | | classroom | |
| | | Offline Mode: | |
| | | Printed Learning | |
| | | Guide | |
| | | (independent study) | |

organic compounds from the simplest to more diverse biomolecules.

CO2 State the unique properties of carbon such that it can form the most diverse organic molecules with itself and with other elements.

| | Part 1 Intro to Organic Chemistry | Define organic chemistry. | Face to Face Classes: | Face to Face Discussion | Long Exam # 1: |
|-----|---|---|---|------------------------------|-----------------------|
| | Inorganic vs. Organic Compounds | Discuss the very nature of carbon. | Ppt presentations | /Online Mode: VSUEE/VC: | Assignmen ts: #1-3 |
| | Electronic Structure and Bonding | Differentiate organic compounds from inorganic compounds. | Board work Virtual Lessons | Note-taking Downloading | Quiz #s 1- |
| 2-5 | Intermolecular Forces of Attraction | Differentiate ionic bonds from covalent | Q & A for clarification | resource materials | |
| | The Nature of Carbon | bonds. | Class interaction | | |
| | Allotropic forms of Carbon | Discuss the formation of covalent bonds in general. | Online/Offline mode: | | |
| | Molecular Geometry Classification of Organic Compounds | Explain the formation of double and triple | Modules, Supplemental videos and Access Moodle | Offline Mode: Note-taking | |

| | bonds using Hybridization theory. | classroom classwork activities | |
|--------------------------------|--|---|--------------------|
| | Differentiate the | | |
| | allotropes of carbon from each other. | Post inquiries on google/ Moodle classrooms | |
| | Discuss the different types of | | |
| | intermolecular forces based on the polarity | | . 2 |
| | of molecules. | | |
| | Classify organic compounds by | | |
| | functional groups. | | |
| | Identify the geometry | | |
| | of molecules based on VSEPR Theory. | | |
| CO3 Illustrate the different t | functional groups, their rea | ctive sites and th | ne type of organic |

reactions that can occur on these sites.

CO4 Name systemically (IUPAC) the organic molecules according to its functional groups as well as their common names.

| CO5 Apply knowledge of organ | nic chemistry in | consumer | products and | environmental | labels. |
|------------------------------|------------------|----------|--------------|---------------|---------|
| | | | | | |

| 5-6 | Part 2 Types of Organic Chemical Reactions Introduction to Reaction Mechanism | Identify the type of reaction based on the products. Predict the reactants/products based on the given reaction. Identify an electrophile/nucleophile in the reaction. Illustrate the direction of the curved arrow(s) in a reaction mechanism. | Face to Face Classes/ Online Mode: Virtual Meeting #3: Powerpoint presentations Board work Virtual Lessons Q & A for clarification Class interaction Offline mode: Modules, Supplemental videos and Access Moodle classroom | Face to face discussion Online Mode: VSUEE/VC: Note-taking Downloading resource materials Offline Mode: Note-taking | Quiz #s 4-5 Assignmen ts # 4-5 |
|-----|---|--|---|--|--------------------------------|
|-----|---|--|---|--|--------------------------------|

| | Part 3(a) Hydrocarbons: Alkanes, Alkenes, Alkynes, Aromatic Hydrocarbons (Aromaticity) Part 3(b) Types of Chemical formula and Structure and Model Part 3 (c) Isomers 3D structures | Draw some hydrocarbons based on the type of structure/model/repre senting a formula of molecules. Differentiate the different types of hydrocarbons based on the geometry, angle strain, reactivity, and the type of reactions they | Face to Face Classes/ Online Mode: Virtual Meeting #3: PowerPoint presentations Board work Virtual Lessons Q & A for | Face to face discussion Online Mode: VSUEE/VC: Note-taking Downloading resource materials | Group Project/Assignment #8: Make 3D representations of the assigned molecules per group. Quizzes #6-8 |
|-----|--|--|---|--|---|
| 6-8 | | undergo. Use the IUPAC System in naming hydrocarbons. | Class interaction Offline mode: | Offline Mode: Note-taking Group | |
| | | Identify the type of isomerism in each set of molecules. | Modules, Supplemental videos, and Access Moodle classroom | Work/Collabo ration | |
| | | Identify commercial and natural products that use/have hydrocarbons. | | | |
| | | Identify aromatic compounds using the four criteria of aromaticity. | | | |
| 9 | MIDTERM WEEK | Coverage: Part 2 and Part 3 | Face to Face | | MIDTERM |

| 10-14 | Part 4 Alkyl Halides Alcohols Ethers Thiols (Amines) | Classify alkyl halides and alcohols according to the type of carbon the halide/hydroxyl group is attached. Identify the type of reactions alkyl halides and alcohols undergo. | Face to Face Classes/ Online Mode: Virtual Meeting #3: Powerpoint presentations Board work | Face to face discussion Online Mode: VSUEE/VC: Note-taking Downloading resource materials | Long Exam #2 Assignmen ts #6-7 Quiz #s 9- 10 |
|-------|--|--|---|--|---|
|-------|--|--|---|--|---|

| | | Use the IUPAC System in naming alkyl halides, alcohols, ethers, amines, and thiols. Identify commercial and natural products that use/have alkyl halides, alcohols, ethers, amines, and thiols. | Virtual Lessons Q & A for clarification Class interaction Offline mode: Modules, Supplemental videos, and access Moodle classroom | | |
|-----------|--|---|--|--|---|
| 14-15 | Part 5(a) Aromatic Compounds Phenols Substituted Benzene | Use the IUPAC System in naming substituted benzenes and aromatic compounds. Know the common names of popular aromatic compounds. Identify the type of reactions aromatic compounds undergo. Identify commercial and natural products that use/have aromatic compounds. | Face to Face Classes/ Online Mode: Virtual Meeting #3: PowerPoint presentations Board work Virtual Lessons Q & A for clarification Class interaction Offline mode: Modules, Supplemental videos, and access Moodle classroom | Face to face discussion Online Mode: VSUEE/VC: Note-taking Downloading resource materials | Long Exam #3 Assignmen ts #8-9 Quiz #s 11-12 |
| 15- 16 | Part 6 Carbonyl Compounds Aldehydes Ketones | Use the IUPAC System in naming aldehydes and ketones Know the common names of popular aldehydes and ketones. | Face to Face Classes/ Online Mode: Virtual Meeting #3: PowerPoint presentations | Face to face discussion Online Mode: VSUEE/VC: Note-taking Downloading resource | Assignmen ts #10-11 Quiz #s 13-14 |

| | | Identify the type of reactions that aldehydes and | Board work | materials | |
|-------|--|--|--|---|--|
| | | ketones undergo. Identify commercial and natural products that use/have aldehydes and ketones. | Virtual Lessons Q & A for clarification Class interaction Offline mode: Modules, Supplemental videos, and access Moodle | | |
| | Part 7 Carboxylic Acids and Derivatives | Use the IUPAC System in naming carboxylic acids and derivatives. | classroom Face to Face Classes/ Online Mode: Virtual Meeting #3: | Face to face discussion Online Mode: VSUEE/VC: | Assignmer ts #12-13 Quiz #s 15-16 |
| | Carboxylic acids Amides Acyl Halides Acetic Anhydride Esters | Know the common names of popular carboxylic acids and derivatives. | PowerPoint presentations Board work | Note-taking Downloading resource materials | |
| 16-17 | | reactions that carboxylic acids and derivatives undergo. Identify commercial and natural products that use/have carboxylic acids and derivatives. | Virtual Lessons Q & A for clarification Class interaction Offline mode: Modules, Supplemental videos, and access Moodle | | |
| 18 | FINALS WEEK | Coverage: Carbonyl Compounds Carboxylic Acid and derivatives | classroom Face to face | | FINAL EXAM Portfolio of |

^{*} VSUEE/VC - VSU E-Learning Environment/ Virtual Classroom

12. Life-long Learning Opportunities

The students will learn the basics and fundamental concept of the biomolecules governing life. In addition, the students will also have a deeper understanding on the changes that

they experience in their body. Moreover, the students will be more conscious and selective with their lifestyle. Lastly, this course will help the students to appreciate life more.

13. Contribution of Course to Meeting the Professional Component (%)

General Education: 0%

Basic Education (Foundation): 20%

Professional Education (Major Field): 80%

14. References and Other Learning Resources

- A. Textbook(s)/ E-Books
- 1. KLEIN, D.R., 2012. Organic Chemistry. John Wiley & Sons, Inc., United State of America
- 2. McMURRY, J. 2016. Organic Chemistry 9th Ed. CEngage Learning
- SOLOMONS, G, FRYHLE, C. and SNYDER, S. 2014. Organic Chemistry 11th Ed. John Wiley and Sons, Inc.
- TIMBERLAKE, K.C., 2009. Chemistry: An Introduction to General Organic and Biological Chemistry, 10th edition
- B. Other Learning Resources (to be updated)

15. Course Assessment and Evaluation

The performance of students will be assessed and evaluated based on the following:

Quizzes (25%) + Assignments (20%) + Examinations (40%) + Project (10%) + Attendance (5%) = (Overall Total) 100%

| Ite m No, | Assessment Tasks | Percentage Contribution (1) | No. of Times in the Semester (2) | Individual Task % Contribution (1/2) |
|-----------------|-----------------------------|-----------------------------------|--|--|
| 1 | Quizzes | 25% | 16 | 1.56% |
| 2 | Assignments | 20% | 13 | 1.54% |
| 3 | Long & Term Examinations | 40% | 5 | 8.00% |
| 4 | Individual/Group Project | 10% | 2 | 5.00 % |
| 5 | Attendance | 5% | 30 | 0.17% |
| | | 100% | | |

| COs | Assessment Tasks | Weight in Percent | Minimum Average for Satisfactory Rating | Target and Standards | |
|------------|----------------------|----------------------|--|--------------------------------------|--|
| | Quizzes (3) | 4.69% | | | |
| co | Assignments (3) | 4.62% | | | |
| #s 1,2, | Project (1) | 5.00% | | At least 60% of the students have at | |
| | Attendance (15) | 2.50% | 60 % | least 60% score | |
| | Long Examination (1) | 8.00% | | | |
| со | Quizzes (13) | 20.31% | | | |

| #s 3, 4, 5 | Assignments (8) | 15.38% | |
|---------------|------------------------------|--------|--|
| -1,0 | Long & Term Examinations (3) | 32.00% | |
| | Project (1) | 5.00% | |
| | Attendance (14) | 2.50% | |
| | TOTAL | 100% | |

| Range | Grade | Range | Grade |
|----------|-------|----------|-------|
| 97 - 100 | 1.00 | 65 - 69 | 2.75 |
| 93 - 96 | 1.25 | 60 - 64 | 3.00 |
| 89 - 92 | 1.50 | below 60 | 5.00 |
| 85 - 88 | 1.75 | | |
| 80 - 84 | 2.00 | | |
| 75 - 79 | 2.25 | | |
| 70-74 | 2.50 | | |

16. Course Policies

- The official virtual classroom is VSU E-Learning Environment (VSUEE) (https://elearning.vsu.edu.ph). A class orientation will be done in relation to the use and navigation of the platform.
- Face to face classes will be implemented otherwise ZOOM or Google Meet will be used for web-conferencing and real-time class meetings. Username and password link will be posted in VSUEE/VC or an invitation link will be sent to your email address.
- 3) Attending face to face is encourage as it is one the criteria for your grade. Attendance to virtual meetings is highly - encouraged but not compulsory. If you cannot attend due to internet connection limitation, there is no problem. Just keep up with the lessons and do all the necessary exercises that is required of you.
- 4) Students shall follow the policy of the school regarding excused and unexcused absences to avoid Dropping. You are excused if you are sick and if you are attending an equally important event that needs your presence.
- 5) The virtual meeting is our avenue for synchronous learning. Class interaction and participation is encouraged, sharing of ideas, feedbacking of your outputs and other related concerns in the subject will be done during this time.
- 6) Original copies of all answers, solution, and projects will be kept by the student, put in a folder/envelope one after the other, and should be bound together to form a "portfolio" as part of the final requirements of the course.
- All quizzes are announced and will be given face to face.
- 8) This Chem 121n Organic Molecules Moodle Platform will be our official instructional material in this subject. It will serve as your guide for the whole semester. Whether you have internet connection or not, use it.

- In the submission of activities, there will be a deduction for late submissions and ON-TIME submission is highly appreciated.
- If you have any inquiries/clarifications, you may contact the course instructor/professor during official class schedule, Monday to Friday ONLY.
- 11) All students are reminded to observe all policies, regulations, and rules of the university and other related laws of the land and are advised to read, understand, and practice the provisions of the VSU Student Manual.
- 12) Lastly, as we embark in this "new normal". Let us have an open mind and heart as we adjust in this new way of delivering the teaching-learning process and continue to aim for quality in education.

This class policy serves as our written agreement for the whole semester. If there are any changes to enhance the class learning opportunity within the semester, it will be communicated accordingly.

17. Course Materials and Facilities Available

Printed Learning Guide, Digital and Physical Reference Chemistry Books, Personal Laptop, Syllabus, Power Point Presentations, Video Lectures and Internet Resources.

| 8. Revision F | listory | | |
|--------------------|---------------------|------------------------|---------------------------------|
| Revision number | Date of Revision | Date of implementation | Highlights of Revision |
| 00 | NA | September 15, 2022 | OBE and ISO format compliant |

| | Name | Signature | Date Signed |
|-------------|---------------------------|------------|-------------|
| Prepared by | Maria Robelyn Aureo-Insik | Marreofert | Sept 9,2022 |

III. INSTRUCTOR/PROFESSOR INFORMATION

| Name of Instructor/Professor | Maria Robelyn A. Insik |
|------------------------------|--|
| 2. Office and Department | Department of Pure and Applied Chemistry |
| 3. Telephone/Mobile Numbers | +6317940037 |
| 4. Email Address | mariarobelyn.insik@vsu.edu.ph |
| 5. Consultation Time | M-F only if applicable |

20. Department Instructional Materials Review Committee:

| Committee | Name | Signature | Date Signed |
|------------------|-------------------------|-----------|---------------|
| Member: | ATOZ A. VASQUEZ | 95 | Sapt. 13,2022 |
| Member: | JACOB GLENN F. JANSALIN | John . | Sept 19, was |
| Department Head: | ELIZABETH S. QUEVEDO | Then | Sypt 13, 202 |

| | Name | Signature | Date Signed |
|---------------|------------------------------------|-----------|-------------|
| Verified by: | MA. THERESA P. LORETO College Dean | | |
| Validated by: | NANCY D. ABUNDA Head, IMD | | |

Note:

- The number of POs will depend on each degree program offered
 COs and Relationship to POs
 - a. (I) Introductory an Introductory Course to an outcome
 - (E) Enabling an Enabling Course or a course that strengthens the outcome
 - c. (D) Demonstrated a Demonstrative Course or a course demonstrating an outcome.

Distribution of copies: OIMD, Department, Faculty







DEPARTMENT OF PURE AND APPLIED CHEMISTRY

Visca, Baybay City, Leyte, PHILIPPINES Telefax: 053-563-7747 Email:dopac @vsu.edu.ph Website: www.vsu.edu.ph

EVALUATION OF OUTCOMES-BASED EDUCATION (OBE) COURSE SYLLABUS

Chem121n Organic Molecules 1st Semester A.Y. 2022-2023

Name of faculty

: Maria Robelyn Aureo-Insik

Department/Institute : Department of Pure and Applied Chemistry

College

: College of Arts and Sciences

| | CRITERIA | Complied | Partially Complied | Not Complied | Remarks |
|------|--|--------------|-----------------------|-----------------|--------------|
| FORM | IAT | | - Compiler | Compiled | |
| 1) | The OBE course syllabus follows the university- prescribed format | - | | | |
| 2) | required number of weeks in one academic term | , | | | |
| 3) | Course policies and grading system are clearly defined | - | | | |
| 4) | The syllabus is designed to align v | with the CMO | -prescribed o | urriculum in i | relation to: |
| | Program Educational Objectives to VSU Vision, Mission, and Quality Policy Statement | | | | |
| b. | Program Outcomes to Program Educational Objectives | | | | |
| C. | Course Outcomes to Program Outcomes | , | | | |
| CON | TENT | | | | |
| 1) | Learning outcomes are clearly articulated (Specific, Measurable, Attainable, Realistic, Time-bounded (SMART) and anchored on Bloom's Taxonomy of Objectives) | - | | | |
| 2) | Course coverage completely follows the course description | - | | | |
| 3) | Topics/lessons are arranged in a logical – sequence | - | | | |
| 4) | Gender-sensitivity and values education are integrated in the syllabus whenever applicable | , | | | |
| 5) | References are relevant, varied and updated. Contains at least five book titles copyrighted within the last 5 years as prescribed by CHED | , | | | |
| TEAC | HING-LEARNING | | | | |
| 1) | Teaching-learning activities are: | | | | |

| | a. varied and relevant | - | | Anne Ann | |
|------|--|---|-----------|---------------|--------------|
| | b. outcomes-based | | | Charles Lines | |
| | c. encourage active learning | - | | | |
| | d. develop the students' critical – thinking skills and reflective judgment | | - 0410000 | | |
| LEAR | NING ASSESSMENT | | A COMPANY | | |
| 1) | Learning outcomes and methods of assessment are aligned | | | | |
| 2) | Assessment methods used are varied and relevant | , | | | |
| 3) | Schedule and frequency of assessment, and expected outputs are clearly defined | 1 | Parlies. | | The state of |

General Recommendation (Pls. check):

| APPROVED for use |
|---|
| Needs to be REVISED (please see comments) |

Department Instructional Materials Review Committee:

| Committee | Name | Signature | Date Signed | |
|-------------|-------------------------|-----------|---------------|--|
| Member: | ATOZ A. VASQUEZ | 963 | Sept. 17,2022 | |
| Member: | JACOB GLENN F. JANSALIN | and | Sept 19, 20 | |
| Chairperson | ELIZABETH S. QUEVEDO | 9 mered | Cent 13 207 | |

| | Name | Signature | Date Signed |
|------------------|------------------------------------|-----------|-------------|
| Verified by 1/2: | MA. THERESA P. LORETO Dean, CAS | | |
| Validated by 2/: | NANCY D. ABUNDA Head, IMD | | |

1/ Means of Verification: Ratings on Individual evaluation sheets of the DIMRC members 2/ Means of Validation: Final action of the College Dean REMINDER:

- 1. The author should not be part of the DIMRC.
- "If the author is the Department Head, he/she will be replaced by another chairperson from among the senior faculty members.
- 3. **If the author is the College Dean, the Head of Instructional Materials Development will approve.
- 4. Follow the next higher supervisor, no same person
- For the component campuses, if the author is the College Dean, the Director for Academic Affairs will approve.
- If the author is the Department Head and at the same time the College Dean, the Director for Academic Affairs will be the Chairperson of the DIMRC, and the Chancellor will approve it.
- (3) Distribution of copies: OHIMD, Department, Faculty,