VISION

An internationally recognized university for cultural continuity and innovations that transforms lives

MISSION

MPSU shall pursue responsive instruction and innovation to produce resilient citizens who contribute to sustainable development.

GOALS

1. Attain quality and excellence in instruction, innovation, research, extension, and resource generation for sustainable development.
2. Advance and promote comprehensive global engagement and strategic collaborations.
3. Foster a vibrant, inclusive and diverse academic environment for cultural dynamism and continuity.
4. Enhance efficiency and cost-effectiveness of management in the delivery of quality services.
5. Sustain harmony within the University and with stakeholders.

THRUSTS

T- Transformational curriculum and instruction for cultural vitality and international education.
R- Relevant production and sustainable resources generation.
A- Accessible and equitable learning resources and student services and development
N- Noteworthy partnerships and extension services towards sustainable communities
S- Sustainable Development Goals integration into programs, projects, and activities
F- Functional leadership that cultivates personnel development amidst changing higher education landscapes
O- Organizational strengthening toward an efficient delivery of services
R- Responsive local and global linkages in harmony with the industrial revolution and transnational education
M- Modern research-based solutions and responsive, innovative technologies through active knowledge generation

CORE VALUES

Professionalism - We endeavor to produce efficient leaders who live by professional and ethical conduct in the workplace at all times.
Resiliency - In any situational crisis that disrupts normalcy, we seek to provide innovations and creative synergy in delivering quality service to our clients and stakeholders.
Inclusivity - Guided by our vision, we aspire to embrace diversity and mutual cooperation to nurture growth across a wide spectrum of endeavors
Moral Integrity - We aim to uphold value- and virtue-oriented individuals who could help cultivate integrity in a morally challenged society
Excellence - As our main driving force, we commit to cultivate distinction among future leaders honed from a culture of quality and stellar learning

SCHOOL OF AGRICULTURE AND FORESTRY
BACHELOR OF SCIENCE IN FORESTRY

COURSE SYLLABUS
2nd Term S.Y. 2024-2025

Course Number: FBS 223

Descriptive Title: Forest Wildlife and Biodiversity and Conservation

Pre-requisite Course/s: None

Course Credits: 3 units (2 unit-lecture & 1 unit-laboratory)

Contact Hours/Week: 5 hours (2-hours lecture & 3-hours laboratory)

Course Description: This course provides an overview of the diversity of flora and fauna in the Philippines. It focuses on the ecological roles of indigenous species and the principles of biodiversity conservation in forest ecosystems. Students will learn methods for documenting, identifying, and assessing species. They will also explore conservation strategies, wildlife trade, and species interactions.

B. Grading System

Class standing grade shall be computed based on the following criteria:

1. Class Standing (Pre-test, post-test, activities) 60%
2. Major examination Ratings 40%

Total: 100%

Midterm and Final Grades shall be computed based on the following:

1. Midterm Grade
   MG = CS/Total Score x50 +50= Total x .60 = CS grade
   Exam Score/Total Score x50 +50 = Total x.40 = Exam grade
   = CS Grade + Exam grade
2. Tentative Final Grade
   TFG = CS Grade + Exam Grade
3. Final Grade
   FG = (TFG x 2) + MG/3

II. COURSE OUTLINE AND LEARNING PLAN

Desired Learning Outcomes	CLO	Course Content	Contact Hours	Teaching and Learning Enrichment Activities (TLAs)	Assessment Tasks (ATs)	References/Suggested Readings	PRC TOS (FLE)
MIDTERM GRADING PERIOD							
At the end of the session, the students should be able to: 1. explain confidently the VGMO of the college to foster appreciation of the directions of MPSPC 2. thoroughly understands the classroom policies; and 3. proficiently grasps the grading system and other requirements of the course.	N/A	**Class Orientation** a. Vision and Mission of the College b. Classroom Policies c. Grading System & Other Requirements	1 hour			Student Handbook	
At the end of the chapter, the students should be able to: 1. define wildlife and biodiversity and their significance; 2. explain the importance of biodiversity in Philippine development;	1, 7, 10	**I. Introduction to Biodiversity and Wildlife Conservation** – Definition of wildlife and biodiversity – Importance of biodiversity in	9 hrs	Lecture Film viewing Group discussion on local ecosystems and their importance	Quiz Film review Recitation Practical assessment	Belsare, D. K. (2007). Introduction to biodiversity. DENR, UNDP, and FPE. (2016). Philippine biodiversity strategy and action plan 2015-2028.	Forest Ecosyste m

3. identify the pressures on Philippine biodiversity; 4. describe the goals and strategies of the biodiversity strategy and action plan (BSAP); and 5. analyze the relationship between wildlife, habitats, and biodiversity.		Philippine development – Pressures on Philippine biodiversity – The Biodiversity Strategy and Action Plan – Relationship between wildlife, habitats, and biodiversity		Laboratory activity (Field observation of local flora and fauna)	Homework/ assignments Written report and presentation of group work	Robinson, W. L., & Bolen, E. G. (1984). Wildlife ecology and management. Underkoffler, S. C., & Adams, H. R. (2021). Wildlife Biodiversity Conservation.	
At the end of the chapter, the students should be able to: 1. classify animals and plants based on key characteristics; 2. explain the ecological role of arthropods in biodiversity; and 3. describe the importance of plant and animal interactions in ecosystems.	2, 4, 8, 10	**II. Fauna, Flora, Invertebrates, and Arthropods** – Overview of fauna and flora – Classification of invertebrates and vertebrates – Ecological roles of arthropods – Plant and animal interactions	10 hrs	Lecture discussion Laboratory activity (Field collection and documentation of arthropods)	Quiz Recitation Homework Practical assessment Written report and presentation of group work	Allaby, M. (2010). Ecology: Plants, animals, and the environment. Chakravarthy, A. K., & Sridhara, S. (Eds.). (2016). Arthropod Diversity and Conservation in the Tropics and Sub-tropics. Kotpal, R. L. (2010). Modern text book of zoology: vertebrates. Tyagi, G. (2016). Animal biodiversity. Kotpal, R. L. (2012). Modern text book of Zoology: Invertebrates	Forest Ecosyste m
At the end of the chapter, the students should be able to: 1. Interpret the IUCN Red List and DENR DAO lists; 2. identify major threats to wildlife in the Philippines; and 3. evaluate the conservation status of endemic Philippine species	1, 3, 7, 10	**III. Conservation Status and Threats to Wildlife** – IUCN Red List and DENR DAO lists – Threats to wildlife: habitat loss, poaching, climate change, pollution – Conservation status of endemic Philippine species	12 hrs	Lecture discussion Group research and discussion of endemic Philippine sp Laboratory activities (Field survey to document threats to wildlife)	Quiz Presentation of group activity Practical assessment Written reports and group presentation	DENR. (2017). Updated national list of threatened Philippine plants and their categories. Mills, L. S. (2012). Conservation of wildlife populations: demography, genetics, and management. IUCN. (2021). The IUCN red list categories and criteria.	Forest Ecosyste m

At the end of the chapter, the students should be able to: 1. compare different animal mating systems; 2. explain reproductive strategies of selected Philippine wildlife species; and 3. analyze the impact of anthropogenic activities on natural mating systems.	1, 6, 9, 10	**IV. Mating Systems and Reproduction in Wildlife Species** – Animal mating systems: monogamy, polygamy, etc – Reproductive strategies in Philippine wildlife – Anthropogenic influences on natural mating systems	11 hrs	Lecture discussion Group research and discussion Laboratory activities (Field observation of mating behaviors in local bird species)	Quiz Presentation of research activity Practical assessment Written report and group presentation Midterm examination	Lane, J. E., Forrest, M. N., & Willis, C. K. (2011). Anthropogenic influences on natural animal mating systems. Maala, C. P. (2001). Endangered Philippine wildlife species with special reference to the Philippine eagle (Pithecophaga jefferyi) and tamaraw (Bubalus mindorensis). Myers, P., R. Espinosa, C. S. Parr, T. Jones, G. S. Hammond, and T. A. Dewey. 2024. The Animal Diversity Web (online). Ritchison, G. (2023). Mating Systems. In *In a Class of Their Own: A Detailed Examination of Avian Forms and Functions.*	Forest Ecosyste m
At the end of the chapter, the students should be able to: 1. differentiate between legal and illegal wildlife trade; 2. analyze the impact of wildlife trade on biodiversity; 3. identify the most traded species in the Philippines; and 4. explain the role of international treaties and national laws in regulating wildlife trade.	3, 8, 10	**V. Wildlife Trade and Its Impact on Biodiversity** – Overview of wildlife trade – Impacts of wildlife trade on biodiversity – Most traded species in the Philippines – International treaties and national laws	10 hrs	Lecture discussion Group research and discussion on the enforcement of wildlife laws and its challenges	Quiz Homework Recitation	Bowman, M., Davies, P., & Redgwell, C. (2010). *Lyster's international wildlife law.* DENR, UNDP, and FPE. (2016). Philippine biodiversity strategy and action plan 2015-2028. Oldfield, S. (Ed.). (2003). The trade in wildlife: regulation for conservation.	Forest Ecosyste m

At the end of the chapter, the students should be able to: 1. Compare in situ and ex situ conservation strategies; 2. evaluate the role of community-based conservation and indigenous knowledge; and 3. design a habitat restoration plan for a local area	1, 5, 9, 10	**VI. Biodiversity Conservation Strategies** – In situ vs. ex situ conservation – Community-based conservation and indigenous knowledge – Habitat restoration and wildlife corridors	10 hrs	Lecture discussion Group activity on designing a habitat restoration plan Laboratory activity (Field assessment of a local habitat and proposal for restoration)	Quiz Group presentation Practical assessment Written report and presentation of group activities	Agduma, A. R., Garcia, F. G., Cabasan, M. T., Pimentel, J., Ele, R. J., Rubio, M., ... & Tanalgo, K. C. (2023). Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines. DENR, UNDP, and FPE. (2016). Philippine biodiversity strategy and action plan 2015-2028. Meena, K. L. (2014). Flora of wildlife Sanctuary. Ramakrishnan, P. S., Saxena, K. G., & Chandrashekara, U. M. (Eds.). (1998). Conserving the sacred: for biodiversity management.	Forest Ecosyste m
At the end of the chapter, the students should be able to: 1. apply methods for assessing wildlife populations and habitats; 2. conduct biodiversity monitoring using appropriate sampling techniques; and 3. calculate and interpret diversity indices using excel and RStudio.	4, 5, 2, 10	**VII. Research Methods in Wildlife Conservation** – Methods for determining wildlife population, distribution, and habitat assessment – Biodiversity assessment methods (DENR-BMB Manual) – Sampling methods – Diversity indices (using excel and RStudio)	24 hrs	Lecture discussion Hands-on training in conducting different methods Problem solving	Quiz Practical assessment Written report and presentation of group activities Problem set	Biodiversity Management Bureau, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. (2017). Manual on biodiversity assessment and monitoring system for terrestrial ecosystems. Diekmann, M., Kühne, A., & Isermann, M. (2007). Random vs non-random sampling: effects on patterns of species abundance, species richness and vegetation-environment relationships. Mandallaz, D. (2007). Sampling techniques for forest inventories.	Forest Ecosyste m, Forest Resourc e Manage ment
Major Exams			**3 hours**				
Total No. of Hours			**90 hrs**				

follow the APA 7th edition style in the revised copy

VI. REFERENCES

Agduma, A. R., Garcia, F. G., Cabasan, M. T., Pimentel, J., Ele, R. J., Rubio, M., ... & Tanalgo, K. C. (2023). Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines. *Regional Sustainability, 4*(2), 203-213.

Allaby, M. (2010). *Ecology: Plants, animals, and the environment.* Infobase Publishing.

Belsare, D. K. (2007). *Introduction to biodiversity.* APH Publishing.

Bowman, M., Davies, P., & Redgwell, C. (2010). *Lyster's international wildlife law.* Cambridge University Press.

Biodiversity Management Bureau, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. (2017). Manual on biodiversity assessment and monitoring system for terrestrial ecosystems. Biodiversity Management Bureau-DENR, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Chakravarthy, A. K., & Sridhara, S. (Eds.). (2016). *Arthropod Diversity and Conservation in the Tropics and Sub-tropics.* Springer.

DENR, UNDP, and FPE. (2016). Philippine biodiversity strategy and action plan 2015-2028.

DENR. (2017). Updated national list of threatened Philippine plants and their categories.

Diekmann, M., Kühne, A., & Isermann, M. (2007). Random vs non-random sampling: effects on patterns of species abundance, species richness and vegetation-environment relationships. *Folia Geobotanica, 42*, 179-190.

IUCN. (2021). The IUCN red list categories and criteria.

Kotpal, R. L. (2010). *Modern text book of zoology: vertebrates.* Rastogi Publications.

Kotpal, R. L. (2012). *Modern text book of Zoology: Invertebrates.* Rastogi Publications.

Lane, J. E., Forrest, M. N., & Willis, C. K. (2011). Anthropogenic influences on natural animal mating systems. *Animal Behaviour, 81*(5), 909-917.

Maala, C. P. (2001). Endangered Philippine wildlife species with special reference to the Philippine eagle (*Pithecophaga jefferyi*) and tamaraw (*Bubalus mindorensis*). *Journal of International Development and Cooperation, 8*(1), 1-17.

Mandallaz, D. (2007). *Sampling techniques for forest inventories.* Chapman and Hall/CRC.

Meena, K. L. (2014). *Flora of wildlife Sanctuary.* Discovery Publishing House Pvt. Limited.

Mills, L. S. (2012). *Conservation of wildlife populations: demography, genetics, and management.* John Wiley & Sons.

Myers, P., R. Espinosa, C. S. Parr, T. Jones, G. S. Hammond, and T. A. Dewey. 2024. The Animal Diversity Web (online). Accessed at https://animaldiversity.org.

Oldfield, S. (Ed.). (2003). *The trade in wildlife: regulation for conservation.* Routledge.

Ramakrishnan, P. S., Saxena, K. G., & Chandrashekara, U. M. (Eds.). (1998). *Conserving the sacred: for biodiversity management.* Science Publishers.

Ritchison, G. (2023). Mating Systems. In *In a Class of Their Own: A Detailed Examination of Avian Forms and Functions* (pp. 1905-2029). Cham: Springer International Publishing.

Robinson, W. L., & Bolen, E. G. (1984). Wildlife ecology and management.

Underkoffler, S. C., & Adams, H. R. (2021). *Wildlife Biodiversity Conservation.* Springer International Publishing.

Tyagi, G. (2016). Animal biodiversity. Random Publications.

VII. POLICIES

1. Punctuality is a must. Arrive on time for all sessions.
2. Wear acceptable clothing and observe proper grooming. No slipper allowed. For field activities, wear appropriate field attire (eg., long pants, closed-toe shoes suitable for uneven terrain, weather-appropriate clothing). Specific gear requirements will be announced.
3. Keep cellphones on silent mode during class.
4. Unnecessary noise and disruptive behavior are prohibited in both settings.
5. All policies in the student handbook will be strictly enforced.
6. Follow all safety protocols and instructions from the instructor during field labs.
7. Handle all shared equipment (eg., measuring tape, GPS receivers) with care. Report any damage or malfunction immediately.

8. Collect field data accurately and diligently. Cheating or fabricating data is strictly prohibited and will result in serious penalties.
9. Practice good environmental stewardship; do not leave trash or disturb the natural environment unnecessarily.

No cheating or copying. These actions are strictly prohibited. Students caught cheating on quizzes or exams will be disallowed from continuing.

10. Attend class regularly.
11. Class participation, including recitation, is expected.
12. Special quizzes/exams are given for excusable absences, provided an admission slip is presented.
13. Instructor consultation hours will be scheduled based on availability.
14. All assignments and outputs are due by the specified deadline.
15. When instructed to submit outputs via email, ensure you follow all directions provided in the email.
16. You may use tools like Grammarly, Quillbot, ChatGPT, Claude, and CoPilot for grammar correction, outline generation, summaries, and drafting creative outputs.
17. AI is NOT allowed for drawing/painting that assesses artistic skills, introspective/speculative tasks (e.g., reflections), paragraph construction for expository/argumentative essays. and recall activities (e.g., quiz, midterm, and final exams).

VIII. PROVISIONS OF LEARNING ACCOMMODATION

The faculty will conduct consultations with students on challenging lessons when requested, ensuring that all learners receive equal treatment, including those with special needs. She will respect individual differences and accommodate various learning styles to create an inclusive environment. Additionally, the faculty will consider student suggestions to enhance the teaching and learning process and adjust instructional methods based on each student's level of understanding. To eliminate barriers to learning, alternative options will be provided, such as using audiobooks for students with dyslexia instead of printed text and allowing extra time for homework or problem sets for students with slower processing speeds. This approach aims to support all students in achieving their academic goals.

Role	Name	Position	Signature	Date
Preparer	Sayrha Fe A. Gaya	Faculty, BSF		Jan. 09, 2025
Reviewer	Fely A. Akilith, PhD	College Librarian		
Noted	Alver W. Claudio, PhD	School Dean, SAF		1/9/2025
Recommending Approval	Rhoda Basco-Galangco, PhD	Director for Curriculum and Instruction		02/02/25
Approved	Brent Greg E. Gomuad, PhD	Campus Director-Tadian Campus		02/6/25