



# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)

**Paderu, Visakhapatnam - District, AP.**

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email.ID :Paderu.jkc@gmail.com.



## DEPARTMENT OF ZOOLOGY

### ADD ON/CERTIFICATE COURSE

**ACADEMIC YEAR: 2018 - 2019**

Name of the Add on/Certificate Course offered: **ZOO18191-ORINITHOLOGY**

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*V. G.*  
Principal  
Govt. Degree College  
PADERU-531024  
Aturi Sitharama Raju Dist.



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## DEPARTMENT OF ZOOLOGY

Date: 20.06.2018

### Proposal for certificate Course in Ornithology

#### Academic Year 2018- 2019

From

To

The Course Coordinator

The Principal

Department of Zoology

Govt. Degree College

Govt. Degree College, Paderu.

Paderu, Visakhapatnam Dist.

Respected Sir,

Sub: Proposal for introducing Certificate Course in **Ornithology**-Department of Zoology Request -Regarding.

We The Department of Zoology writing to propose the implementation of a Certificate Course in Ornithology for our B.Sc./B. Com/B. A Students at our esteemed Institution from 02.07.2018 to 27.08.2018.

So kindly grant permission for The Department of Zoology to conduct the Certificate Course, Additionally, please allow the faculty to discuss the Syllabus and Course outcomes during the staff council meeting.

Thanking you sir for considering this Proposal.

**Name of the Certificate Course: Ornithology**

**Course Coordinator : Mr.P.Leela Prasad**

**Yours faithfully**

Mr.P.Leela Prasad

Course Coordinator

Department of Zoology

Principal

Govt. Degree College

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Date: 27.06.2018

## DEPARTMENT OF ZOOLOGY

### CERTIFICATE COURSE ON ORNITHOLOGY

#### COURSE SYLLABUS

Name of the Course: Ornithology

Course Code: ZOO18191-Ornithology

Course Coordinator: Mr.P.Leela Prasad

Academic Year: 2018-2019

Total work load: 45 Days/1 Hour per day

#### **Unit 1: Introduction to Ornithology and Avian Diversity**

- 1.1. Introduction to Ornithology and its relevance in biology and ecology
- 1.2. Classification and Diversity of Avian species

#### **Unit 2: Bird Anatomy and Physiology**

- 2.1. Structural adaptations for flight and other behaviors.
- 2.2. Uniqueness of Bird Anatomy and Physiology

#### **Unit 3: Bird Behavior and Avian Ecology**

- 3.1. Breeding behavior, courtship and mating rituals.
- 3.2. Nestling, parenting and communication among birds.
- 3.3. Habitat preferences and Adaptations.
- 3.4. Migration patterns and strategies.

#### **Unit 4: Birds Identification and Ornithological research methods**

- 4.1. Field techniques for identifying Birds.
- 4.2. Use of field guides and birding resources.
- 4.3. Bird banding and marking.
- 4.4. Bird surveys and monitoring techniques.


#### **Unit 5: Bird Conservation evolution, Paleontology**

**Unit 5: Bird Conservation evolution , Paleontology**

- 5.1. Threats to bird population and habitats.
- 5.2. Conservation strategies and efforts.
- 5.3. Evolutionary history of birds.
- 5.4. Fossil evidences and ancestral relationships.

  
Course Coordinator

  
IQAC Coordinator

  
Principal  
Principal  
Govt. Degree College  
PADERU 534 024  
Alluri Sitharama Raju-Dist.



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Date: 27.06.2018

## DEPARTMENT OF ZOOLOGY

### CERTIFICATE COURSE ON ORNITHOLOGY

#### REFERENCE BOOKS

1. Lovette, I.J and Fitzpatrick, J.W. 2016. Handbook of Bird Biology, 3<sup>rd</sup> ed. Wiley.
2. Gill, F.B, and Prum, R.O. 2018. Ornithology, 4<sup>th</sup> ed. Macmillan.
3. Birkhead, T. 2013. Bird Sense: What it's like to be a bird? Bloomsbury, NY.
4. Birkhead, T., Wimpenny, J., and Montgomery, B. 2014. Ten Thousand Birds: Ornithology since Darwin. Princeton University Press, Princeton, NJ.
5. Richard Grimmet, Caro Inskipp and Tim Inskipp, Birds of the Indian Subcontinent.
6. Salim Ali and Sidney Dillon Ripley, Salim Alis Birds of India.
6. Carles Darwin's Bird collection and ornithological knowledge during the voyage of H.M.S Beagle, 1831-1836.
7. John J.Videler Avian Flight (Oxford Ornithology Series) 1<sup>st</sup> Ed.
8. Gray W Kalsar The Inner bird: Anatomy and evolution Hard cover March-2017.
9. Brian Speer BS DVM, Current Therapy in Avian Medicine and Surgery 1<sup>st</sup> Ed.
10. All. Salim, the Fall of a Sparrow (OIP): An Autobiography Paper Back-1st August 1997.

  
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Date: 27.06.2018

## DEPARTMENT OF ZOOLOGY

### CERTIFICATE COURSE ON ORNITHOLOGY

#### LEARNING OUTCOMES


Ornithology is the branch of biology deals with the Birds and its importance.

It helps in understanding biodiversity, ecosystem, and health and provides insights in to environmental changes. Birds also serves as indicators of ecosystem stability and their behavior, migration patterns can be crucial for monitoring environmental shifts and climatic change. It is also contributes to conservation efforts by identifying threats to bird populations and habitats.

1. To understanding Ornithologists contribute to the conservation of bird species and Their habitats, helping prevent the decline or extinction of vulnerable populations.
2. To understanding the role of birds in ecosystems aids in assessing and maintaining the Health of natural environment, as birds often serves as indicators of ecological balance.
3. To know that the ornithological research provides valuable data for monitoring environmental changes, including the impact of climate change, pollution and habitat loss.
4. To know that ornithology contributes to public awareness and appreciation of birds, fostering a sense of evolutionary biology, animal behavior, and ecological interactions.
5. To know that Ornithologists identify and study threats bird populations, such as habitat destruction, pollution and the spread of invasive species leading to targeted conservation efforts.
6. It educating the future generation scientists, conservationists, and the general public About birds and their importance in nature.
7. To know that ongoing research may lead to the discovery of new bird species and Expanding knowledge of avian diversity.
8. To understand the impact of climate on bird populations, informing climate change mitigation and adapting strategies.

  
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## DEPARTMENT OF ZOOLOGY

Date: 28.06.2018


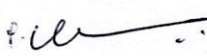
### MINUTES OF MEETING

The following are the minutes of the meeting is held on 28.06.2018 at 11.00 am for introduction of a certificate course in **Ornithology** for B.Sc / B.Com / B.A students for the academic year **2018-2019**.

**The following minutes have been discussed and resolved unanimously.**

1. It is proposed to start a certificate course in Ornithology for the students of B.Sc, B.COM, B.A during the academic year 2018 – 2019.
2. It is proposed to endorse Sri P.Leela Prasad as course coordinator.
3. It is suggested to the coordinator to enroll maximum number of students for the certificate course.
4. It is also discussed to use Virtual class room and other equipment to teaching an easy way.
5. It is also discussed how we can motivate the students towards the course.

#### Members of the committee during minutes

1. 
- 2.
- 3.
4. 
- 5.

  
Course Coordinator

  
IQAC Coordinator

  
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## DEPARTMENT OF ZOOLOGY

Date: 22.06.2018

### CIRCULAR

**Sub: Introduction of Certificate Course in Ornithology.**

Dear Students,

Department of Zoology is pleased to announce the implementation of a new Certificate Course in **Ornithology** for the Academic year 2018-2019 to B. Sc /B.Com /B.A students.

The Certificate Course is a short term Certificate course in Ornithology, aimed at equipping individuals with valuable skills and knowledge in the field of Silk production. The Certificate Course which is designed and offered by our department for the benefit of our students. Course will be conducted at free of cost and based on the performance of the participated students, the merit certificate will be issued after the successful completion of the course.

We encourage all interested individuals to register their Names with the Course Coordinator and to take advantage of this learning opportunity.

Thanking you for your attention and cooperation.

**Name of the Certificate Course** : Ornithology

**Course Coordinator** : Mr.P.Leela Prasad

**Eligibility of the course** : 10+2

**Fees structure** : Unpaid course

**Intake capacity** : Total numbers of seats 60

**Duration of the course** : 45 Days/1 Hour Per day.

**Commencement of Date and time:** 02.07.2018 (9.00 am to 5.00 pm)

  
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IQAC Coordinator

  
Principal



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Date: 27.06.2018

## DEPARTMENT OF ZOOLOGY

### CERTIFICATE COURSE IN ORNITHOLOGY (2018-19)

#### INTRODUCTION:

Zoology is aimed at priming the students for their future careers and study in the fields of biological sciences. The students are prepared for pursuing their post-graduate studies. They would also be able to take up entrepreneurship related to biological sciences. Additionally, the students could choose to join public or private sectors like fishery, forestry, wildlife conservation, agricultural research, health services, environmental management and restoration.

The students to become reasonably self-sufficient thereby increase their employability. Acquisition of these skills by students will open better opportunities for them in the fields of higher studies and research in addition to increasing their employability.

#### AIMS AND OBJECTIVES


1. To investigating the behavior, communication, mating rituals, nestling habits of birds to gain insights into their ecology and evolution.
2. To assessing and monitoring bird populations to contribute to the conservation of biodiversity and ecosystems.
3. To study the ecological roles of birds within ecosystems, including their impact on plant life- insect control and overall ecosystem health.
4. To investigating bird migration to understand the factors influencing these patterns and how they adapt to different environments.
5. To monitoring bird's health to identify diseases and understanding their potential impact on both on avian and human populations.
6. To study the evolutionary history and relationships among different bird species.
7. To educate the public about importance of birds, their role in ecosystems and promoting conservation efforts to ensure their survival.
8. To applying practical knowledge to address practical issues such as the impact of human activities on bird populations and finding suitable solutions.
9. To identifying critical habitats for various bird species and advocating for their preservation to maintain healthy ecosystems.

9. To identifying critical habitats for various bird species and advocating for their preservation to maintain healthy ecosystems.

10. To investigate how birds respond to climate change, helping scientists understanding of birds and the implications for both avian and human communities.

  
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## DEPARTMENT OF ZOOLOGY

### CERTIFICATE COURSE ON ORNITHOLOGY

#### WILLING STUDENTS LIST

Name of the Course: Ornithology

Course Code: ZOO18191-Ornithology

Course Coordinator: Mr.P.Leela Prasad

Academic Year: 2018-2019

Total work load: 45 Days/1 Hour per day

SL.NO	REGD.NUMBER	STUDENT NAME	GROUP
1.	717125405069	A.Thirupathi Babu	B.Sc CBZ
2.	717125405070	A.Srinu	B.Sc CBZ
3.	717125405106	B.Krishna Gopal Raju	B.Sc BZH
4.	718125405067	B.Kalyan	B.Sc CBZ
5.	717125405104	B.Laxmi	B.Sc BZH
6.	717125405109	B.Suman	B.Sc BZH
7.	717125405075	C.Vijay Kanth	B.Sc BZH
8.	717125405080	D.Meena	B.Sc BZH
9.	718125405141	D.Viswanath Sankar	B.Sc BZH
10.	718125405110	D.Visanth	B.Sc BZH
11.	718125405113	G.Ravi	B.Sc BZH
12.	717125405077	G.Suseela	B.Sc CBZ
13.	717125405112	G.Venkata Sai	B.Sc CBZ
14.	717125405080	J.Mohan Babu	B.Sc CBZ

15.	717125405082	K.Bala Raju	B.Sc CBZ
16.	717125405120	K.John	B.Sc BZH
17.	717125405122	K .Dhana Lakshmi	B.Sc BZH
18.	718125405083	K.Lavanya	B.Sc CBZ
19.	718125405120	K.Konda Babu	B.Sc BZH
20.	718125405083	K.Adinarayana	B.Sc CBZ
21.	717125405091	P.Maheswari	B.Sc CBZ
22.	717125405094	P.Prema Kumari	B.Sc CBZ
23.	717125405126	P.Sirisha	B.Sc BZH
24.	717125405129	P.Umanth	B.Sc BZH
25.	718125405125	P.Bangaraiah	B.Sc BZH
26.	718125405126	P.Padmaja	B.Sc BZH
27.	717125405132	P.Puspamma	B.Sc BZH
28.	717125405096	P.Vijaya Bharathi	B.Sc CBZ
29.	717125405070	S.Simhachalam	B.Sc CBZ
30.	717125405100	S.Anusha	B.Sc CBZ
31.	717125405133	S.Sai Kiran	B.Sc BZH
32.	718125405095	S.Kesava Rao	B.Sc CBZ
33.	717125405101	S.Indra Veni	B.Sc CBZ
34.	717125405134	S.Sundaramma	B.Sc BZH
35.	718125405135	U.Seshu Kumar	B.Sc BZH
36.	717125405101	V.Prasanth	B.Sc BZH
37.	718125405136	V.Eswaramma	B.Sc BZH
38.	718125405138	V.Matya Raju	B.Sc BZH

39.	717125405137	V.Chandramma	B.Sc BZH
40.	717125405139	V.Ganga Bhavani	B.Sc BZH
41.	717125405074	B.Padma Latha	B.Sc CBZ
42.	717125405076	G.Sravani	B.Sc CBZ
43.	717125405078	Gopichand P	B.Sc CBZ
44.	717125405079	G.Raj Kumar	B.Sc CBZ
45.	717125405113	G.Kumari	B.Sc BZH
46.	717125405114	G.Naga Devi	B.Sc BZH
47.	717125405115	H.Kavitha	B.Sc BZH
48.	717125405084	K.Anitha Kumari	B.Sc BZH
49.	717125405086	K.Malli Babu	B.Sc CBZ
50.	717125405117	K.Jagapathi Babu	B.Sc BZH
51.	717125405090	M.Vara lakshmi	B.Sc CBZ
52.	717125405123	M.Devi	B.Sc BZH
53.	717125405127	P.M.Konda babu	B.Sc BZH
54.	717125405095	P.Kasulamma	B.Sc CBZ
55.	717125405130	P.Prabhavathi	B.Sc BZH
56.	717125405131	P.Satya vathi	B.Sc BZH
57.	717125405135	V.Mounika	B.Sc BZH
58.	717125405103	V.Charitha	B.Sc CBZ

59.	717125405104	V.Manga	B.Sc CBZ
60.	717125405138	V.Lingamurthy	B.Sc BZH
61.	117125301031	KUDA AVINASH	II B.A HEP
62.	117125301032	KUDELI SAI KUMAR	II B.A HEP
63.	117125301033	KUMIDISETTY JHANSI RANI	II B.A HEP
64.	117125301034	LOCHALI PRAMEELA	II B.A HEP
65.	117125301035	MAJJI BALA RAJU	II B.A HEP
66.	117125301036	MARRI ISSAK	II B.A HEP
67.	117125301037	MODA GANESH	II B.A HEP
68.	117125301038	MUDILI VENKATA RAMAYYA	II B.A HEP
69.	117125301039	MUDILI VENKATA RAMAYYA	II B.A HEP
70.	117125301040	NANDIBOYINA INDRANI	II B.A HEP
71.	117125301041	NANDOLISIMHACHALAM	II B.A HEP
72.	117125301042	PALASI MADHAVI	II B.A HEP
73.	117125301043	PALASI RAMA LINGAM	II B.A HEP
74.	117125301044	PALASI VENI	II B.A HEP
75.	117125301045	PANGI BALARAJU	II B.A HEP
76.	117125301046	PANGI HANUMANTHA RAO	II B.A HEP
77.	117125301047	PANGI KUMARI	II B.A HEP
78.	117125301048	POTTANGI LAKSHMI	II B.A HEP
79.	117125301049	POYA SAI KUMAR	II B.A HEP

80.	117125301050	PULLAYADORA JYOSNA DEVI	II B.A HEP
81.	717125405105	ALLANGI VINAY KUMAR KRISHNA PRASAD	II BSc BZH
82.	717125405106	BAKURU KRISHNAGOPAL RAJU	II BSc BZH
83.	717125405107	BOINI MAHESWARI	II BSc BZH
84.	717125405108	BONDA MARIYA	II BSc BZH
85.	717125405109	BUDIDE SUMAN	II BSc BZH
86.	717125405110	CHEEKATI PARVATHAMMA	II BSc BZH
87.	717125405111	DEESARI MEENA	II BSc BZH
88.	717125405112	GADDIPANGI VENKATA SAI	II BSc BZH
89.	717125405113	GOLLORI KUMARI	II BSc BZH
90.	717125405114	GUDLA NAGA DEVI	II BSc BZH
91.	717125405115	HARIBARIKI KAVITHA	II BSc BZH
92.	717125405116	KOPPALA DHAMAYANTHI	II BSc BZH
93.	717125405117	KORABU JAGAPATHI NAIDU	II BSc BZH
94.	717125405118	KORRA CHINNA RAO	II BSc BZH
95.	717125405119	KORRA GAYITHRI	II BSc BZH
96.	717125405120	KORRA JOHN	II BSc BZH
97.	717125405121	KORRA SINDHU	II BSc BZH
98.	717125405122	KUNDURU DHANA LAKSHMI	II BSc BZH
99.	717125405123	MARRI DEVI	II BSc BZH
100.	717125405124	MINUMULA VARALAKSHMI	II BSc BZH

101.	717125405125	ORANAINI BHAVANI	II BSc BZH
102.	717125405126	PALLIBOINI SIRISHA	II BSc BZH
103.	717125405127	PANGI MATSYA KONDABABU	II BSc BZH
104.	717125405128	PANGI PUSHPALATHA	II BSc BZH



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Date: 02.07.2018

## DEPARTMENT OF ZOOLOGY CERTIFICATE COURSE ON ORNITHOLOGY COURSE DELIVERY

Name of the Course: Ornithology

Course Code: ZOO18191-Ornithology

Course Coordinator: Mr.P.Leela Prasad


Academic Year: 2018-2019

Total work load: 45 Days/1 hour per Day

S.NO	TOPICS TO BE COVERED	HOURS	DATE OF DELIVERY
1	1.1. Introduction to Ornithology and its relevance in biology and ecology 1.2. Classification and Diversity of Avian species	6 Hours 4+2	02.07.2018
2	2.1. Structural adaptations for flight and other behaviors. 2.1. Uniqueness of Bird Anatomy and Physiology	6 Hours 4+2	09.07.2018
3	3.1. Breeding behavior , courtship and mating rituals 3.2. Nestling, parenting and communication among birds	6 Hours 4+2	16.07.2018
4	3.3. Habitat preferences and Adaptations 3.4. Migration patterns and strategies	6 Hours 4+2	23.07.2018
5	4.1. Field techniques for identifying Birds 4.2. Use of field guides and birding resources.	6 Hours 4+2	30.07.2018
6	4.3. Bird banding and marking 4.4. Bird surveys and monitoring techniques.	6 Hours 4+2	06.08.2018
7	5.1. Threats to bird population and habitats. 5.2. Conservation strategies and efforts.	4 Hours	13.08.2018
8	5.3. Evolutionary history of birds. 5.4. Fossil evidences and ancestral relationships.	4 Hours	20.08.2018

  
Course Coordinator

  
IQAC Coordinator

  
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## CERTIFICATE OF COMPLETION

This is to certify that Sri/Kmri. B. Lakshmi, Regd. No. 717125405104 of B.Sc, CBZ of Govt. Degree College, Paderu , has completed Certificate Course in ORNITHOLOGY organized by Department of Zoology for the Academic Year 2018-2019.He/she passed the Course Successfully in **A+** Grade. The overall performance of an individual is found to be Satisfactory.

**COURSE COORDINATOR**

*P. V. S. S.*



*U. A.*

**SIGNATURE OF THE PRINCIPAL**

Govt. Degree College  
PADERU 534 024  
Alluri Sitharama Raju-Dist.

