## FISH, GAME AND FUR ANIMAL MANAGEMENT.

The curriculum of fish, game and fur animal management in the Animal Industry Division of the School of Agriculture correlates the work with agricultural departments offering instruction in subjects that have direct and practical application in wild life conservation. This, together with certain courses in the School of Forestry and in the School of Science, through facilities, equipment, and instruction in basic subjects, contributes greatly toward the enrichment of this curriculum for students majoring in the applied fields of wild life conservation and fur animal management.

Instruction is designed to train students for state and Federal service in wild life conservation and in the U. S. Biological Survey work; for fish and game managers of estates, game and fishing clubs, and land using industries; for fur and game farming as private undertakings; and for the needs of students from other departments and schools who desire work in the practical applications of game, fish, and fur animal management.

Corvallis, the location of the Institution, is unique in possessing facilities for game and fish management work because of its proximity to state fish hatcheries and state game farms. Through the cooperation of the School of Forestry, the use of the Peavy Arboretum as a wild life sanctuary allows for practical studies of game and fish management. The State of Oregon possesses rich, natural fields for a wide scope of study of indigenous wild life and its climatic and topographical features offer advantages in the raising of fur-bearing animals.

Practical field work in fish and game management or attendance at one or more of the summer camps to be maintained in strategic locations, such as the Wallows Mountains, Crater Lake National Park, the U.S. Biological Survey bird refuge at Malheur Lake, and the Oregon coastal section, will be required for graduation. These camps will be located in different areas each summer so as to offer opportunities for study in the various branches of fish and game management.

#### DESCRIPTION OF COURSES

#### Lower Division

- FG 251. Fish and Game Conservation\*; \*\* First term. 2 hours. An introductory course dealing with wild life as a valuable economic and social resource, and the need of its conservation through scientific administration and manipulation. Two lectures or recitations.
- FG 261. Preservation and Mounting of Game Specimens.\* Second term. 2 hrs. The making of museum mounts of birds, mammals, and fish, and the methods of collecting and preserving material for scientific investigations. One lecture, 1 three-hour laboratory period.

### Upper Division

- FG 351, 352, 353. Fish and Game Management\*; \*\* Three terms. 3 hours each term. A study of the theories of game and fish management, game and fish administration in forest areas, wild life sanctuaries, state and national parks, submarginal areas, farm lands, etc. Special emphasis is placed on the measurement of game and fish populations; methods of measurement and diagnosis of productivity; types of game refuges; control of hunting and fishing; parasite and predatory control; control of water and food conditions; control of cover; and other techniques involving fish and game. Two lectures or recitations, I three-hour laboratory period or field work.
- FG 357, 358. Wild Life Field Work\*; \*\* Term credits and hours to be arranged. A general course in wild life field work conducted in a summer camp, or field work under supervision of some state or federal service. The course may be taken for a series of summers as a different area is studied each year.
- FG 360. Applied Fish and Game Ecology\*; \*\* First term, 3 hours. The study of the biologies of game animals and game fish; their requirements of food and shelter; their breeding habits; and other factors regulating their abundance or decrease. Practice in making fish and game surveys and in modifying environmental conditions for increasing game animals and fish. Special attention is given to field practices and laboratory techniques. Two lectures or recitations, I four-hour laboratory period or field work.
- FG 451. Propagation and Management of Game Birds.\* First term. 3 hours. Studies of game birds with special attention to their propagation on game farms and under nateral conditions, and their management in forest areas, wild life sanctuaries, submarginal lands, and agricultural areas. Two lectures or recitations, I four-hour laboratory period or field work.
- FO 454. Propagation and Management of Game Fish. \*\* Second term. 3 hours. Studies of game fish with special attention to fish hatchery methods, natural propagation, and methods of fish liberation. Much of the laboratory and field work will be conducted at the Alsea Fish Hatchery. One Lecture or recitation, I five-hour laboratory period or field work.

FG 457, 458. Management of Big Game and Fur Farming. \* Second and third terms, 3 hours each term. Studies dealing with the various species of game and fur-bearing mammals in Oregon and the desirable species that might be introduced, their habits, distribution, management under natural conditions, care in enclosures, their economic values, and laws for protection. Two lectures or recitations, 1 three-hour laboratory period or field work.

<sup>\*</sup> In collaboration with the United States Biological Survey, U.S.D.A.
\*\* In collaboration with the United States Bureau of Fisheries, U.S.D.G.

# FISH AND GAME MANAGEMENT

# - Freshman Year -

| - Presimen rear -   | lst                                     | _ 2nd           | 3rd                |
|---|---|-----------------|--------------------|
| English Composition (Eng. 111, 112, 113)  General Zoology (Z201, 202, 203)  General Botany (Bot. 201, 202  General Forestry (F. 111)  Extempore Speaking (Sp. 111)  Cereal Production (F.C. 111)  Livestock Management I (A.H. 221)  Practical Poultry Keeping (P.H. 211)  Agricultural Resources (A. Ec. 111)  Fish and Game Conservation (F.G. 251)  Physical Education  Military Science  - Sophomore Year -   | 3 .4                                    | 3333.3          | 333 - 33 - 1 1 17  |
| Principles of Economics (Ec. 201, 202, 203) Chemistry (Ph. S. 102) Principles of Economic Entomology (Ent. 211) General Bacteriology (Bac. 204) Aquatic Entomology (Ent.) Economic Ornithology (Z.) Economic Mammalogy (Z.) Animal Ecology (Z.) Soils (214) Anatomy of Domestic and Game Animals (V.M. 211) Physiology of Domestic and Game Animals (V.M. 221, 222) Preservation and Mounting of Game Specimens (F.G. Advance Physical Education Military Science | 3 | 34 - 3 32 1 1 7 | 3 - 3 - 3 - 1 1 17 |

# - Junior Year -

| • |  | lst          | 2nd                      | 3rd   |
|---|--|--------------|--------------------------|---|
| • | Fish and Game Management (F.G. 351, 352, 353). Silviculture: Silvics (F. 341). Systematic Botany (Bot. 303). Anatomy of the Fowl (V.M. 311). Diseases of Poultry and Game Birds (V.M. 351). Parasitic Diseases of Domestic and Game Animals (V.M. 361) Incubation and Brooding (P.H. 321).                 | -            | 3 - 3 -                  | 3 4 3                                       |
|   | Wild Life Food Crops (F.C. 318) Technical Report Writing (Eng. 321, 322, 323) Electives  | 32 14 17     | 1<br>5<br>17             | 1 2 17                                      |
|   | - Senior Year -  |              |                          |   |
|   | Applied Fish and Game Ecology (F.G. 360).  Propagation and Management of Game Birds (F.G. 451)  Propagation and Management of Game Fish (F.G. 454)  Management of Big Game (F.G. 457).  Fur Farming (F.G. 458.  Land Economics (A.Ec. 421).  Dendrology (F. 353).  American National Government  Electives | 3 - 3 - 8 17 | -<br>33<br>-<br>38<br>17 | -<br>-<br>-<br>-<br>3<br>4<br>-<br>10<br>17 |

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#### DESCRIPTION OF COURSES

#### Lower Division

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# FISH AND GAME MANAGEMENT

## - Freshman Year -

| <u>lst</u>  | 2nd                                | 3rd                 |
|---|------------------------------------|---------------------|
| English Composition (Eng. 111, 112, 113)                            | 3<br>3<br>3<br>-3<br>-1<br>1<br>17 | 333 - 33 - 1 1 1 17 |
| - Sophomore Year -  |                                    |                     |
| Principles of Economics (Ec. 201, 202, 203)3 Chemistry (Ph. S. 102) | 34 - 3 321 17                      | 3 - 3 - 3 - 1 1 17  |
|   |                                    |                     |

## - Junior Year -

|  | 1st                              | 2nd                        | 3rd  |
|--|----------------------------------|----------------------------|--|
| Fish and Game Management (F.G. 351, 352, 353) Silviculture: Silvics (F. 341) Systematic Botany (Bot. 303) Anatomy of the Fowl (V.M. 311) Diseases of Poultry and Game Birds (V.M. 351)   | 34                               | 3 - 3 -                    | 3 4 3  |
| Parasitic Diseases of Domestic and Game Animals (V.M. 361) Incubation and Brooding (P.H. 321) Ichthyology (Z. 321) Wild Life Food Crops (F.C. 318) Technical Report Writing (Eng. 321, 322, 323) Electives   | -<br>3<br>2<br>1<br>4<br>17      | 3<br>-<br>1<br>5<br>17     | 1<br>2<br>17                                     |
| Applied Fish and Game Ecology (F.G. 360). Propagation and Management of Game Birds (F.G. 451) Propagation and Management of Game Fish (F.G. 454) Management of Big Game (F.G. 457). Fur Farming (F.G. 458. Land Economics (A.Ec. 421). Dendrology (F. 353). American National Government Electives | 3<br>3<br>-<br>3<br>-<br>8<br>17 | - 3<br>3<br>- 3<br>8<br>17 | -<br>-<br>-<br>-<br>3<br>-<br>4<br>-<br>10<br>17 |