# Course Plans 2022-2023 B1391 Bachelor of Agricultural Science

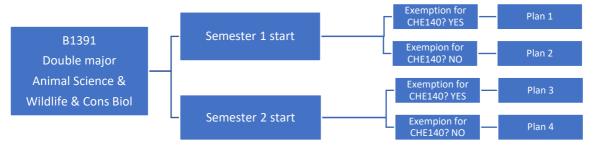
# Double major Animal Science & Conservation & Wildlife Biology - 72 credit points

Academic Chair Animal Science: Associate Professor Andrew Thompson and Dr Serina Hancock Email: <a href="mailto:Andrew.Thompson@murdoch.edu.au">Andrew.Thompson@murdoch.edu.au</a>; S.Hancock@murdoch.edu.au

Academic Chair Conservation & Wildlife Biology: Dr Barbara Bowen B.Bowen@murdoch.edu.au

#### **Completing Your Course Plan**

#### Step 1: Choose the correct course plan template



#### **Step 2: Course Core Units**

Students must complete (or be exempt from) the following units: BSC100, MAS180, CHE140, BIO152, ENV241

Note: Students who achieved a final scaled score of 50 percent or more in Chemistry 3A/3B or Chemistry ATAR within the past three years should apply for exemption for CHE140 Fundamentals of Chemistry.

#### Step 3: Animal Science Major

Students must complete the following units: BMS107, ANS101, VET272, ANS230, ANS221, VET380, ANS333, ANS337

#### Step 4: Conservation & Wildlife Biology Major

Students must complete the following units: **BIO152, ENV102, BIO257, BIO375, BIO356, BIO376** Plus **TWO** from the following: **ENV328, BIO245, BIO244** 

#### Step 5: Career Learning Spine

Students must complete THREE career learning spine units:

**MSP100** Career Learning: Managing Your Career -3 points (MURDOCH: S1-external, S2-external, SUM-external). NOTE – MSP100 ideally completed <u>before</u> Career Learning Spine specified electives

Plus select **TWO** from the following list of Career Learning Spine specified electives:

- MSP200 Building Enterprise Skills 3 pts (MURDOCH: S1-external, S2-external)
- MSP201 Real World Learning 3 pts (MURDOCH: S1-external, S2-external, SUM-external, W-external) Note: Students may be able to do 2x MSP201 or MSP201 alternatives
- ANS302 Farm Placement 3 pts Alternative to MSP201 (MURDOCH: Y-placement) Note: Students should commence ANS302 in Semester 1
- **ANS303** Industry Tour 3 pts *Alternative to MSP201* (MURDOCH: S2-internal) *Note subject to availability and available to year 3 or year 4 students only*
- **VLS302** Professional Placements in Veterinary and Life Science (MURDOCH: S1-external, S2-external, SUM-external) *NOTE subject to availability*

## Step 6: General Electives added to bring total credit points to 72 points

Students with exemption for CHE140 should include **ONE** general elective. The timing and type of unit is flexible with only restriction that no more than 30 credit points can come from Part 1 units.

### Suggested general electives:

- **VET101** Sustainable and Ethical Animal Management) 3pts (MURDOCH: S2-internal) recommended for students applying for transfer to veterinary science
- "Unused" CWB major electives can be used as general electives: ENV328, BIO245, BIO245
- ANS363 Applied Animal Agriculture 3 pts (MURDOCH: S1-internal)
- ANS364 Applied Animal Breeding 3 pts (MURDOCH: S2-internal)
- ANS365 Equine Physiology and Behaviour 3 pts (MURDOCH: S1-internal)
- ANS366 Equine Nutrition and Health 3pts (MURDOCH: S2-internal)

Note: A minor cannot be added/named on degree with double major at this point in time

# Step 7: Confirm your course plan contains all required units using the checklist

# **B1391 Course Plan Checklist**

| B1391 Course Requirements  |  |
|--|--|
| Units total 72 credit points   |  |
| Core: BSC100   |  |
| Core: MAS183   |  |
| Core: CHE140   |  |
| Core: BIO152   |  |
| Core: ENV241   |  |
| Career Learning Spine 1: MSP100  |  |
| Career Learning Spine 2: specified elective (MSP200 or MSP201 or VLS302) |  |
| Career Learning Spine 3: specified elective (MSP200 or MSP201 or VLS302) |  |
| At least 1 major: animal science/animal health/crop and pasture science  |  |

# **Major: Animal Science MJ-ANS**

| BMS107 | Vertebrate Form and Function               |  |
|--------|--|--|
| ANS101 | Intro to Livestock Science & Genetics      |  |
| VET272 | Comparative Mammalian Biochemistry         |  |
| ANS230 | Animal Production Systems II               |  |
| ANS221 | Animal Structure and Function              |  |
| VET380 | Veterinary Nutrition and Animal Toxicology |  |
| ANS333 | Animal Production Systems III              |  |
| ANS337 | Advanced Animal Production                 |  |

# **Major: Conservation & Wildlife Biology**

| BIO152 | Cell Biology   |  |
|--------|--|--|
| ENV102 | Foundations of the Environment                         |  |
| BIO257 | Australian Biodiversity                                |  |
| BIO375 | Conservation Biology                                   |  |
| BIO356 | Genetics and Evolution                                 |  |
| BIO376 | Wildlife Biology                                       |  |
|        | CWB major specified elective 1: ENV328, BIO245, BIO244 |  |
|        | CWB major specified elective 2: ENV328, BIO245, BIO244 |  |

# Course Plan 1 – Semester 1 entry with CHE140 exemption

|        | Semester 1                                      |    | Semester 2  |    |
|--------|---|----|---|----|
| ear 1  | BSC100 Building Blocks for Science Students     | 3  | BIO152 Cell Biology                                 | 3  |
|        | MAS183 Statistical Data Analysis                | 3  | BMS107 Foundations of Vertebrate Form & Function    | 3  |
|        | BIO103 Intro to Environmental Biology           | 3  | ANS101 Introduction to Livestock Science & Genetics | 3  |
| ٣      | Career Learning Spine or General Elective       | 3  | ENV102 Foundations of the Environment               | 3  |
|        |   | 12 |   | 12 |
|        | VET272 Comparative Mammalian Biochemistry       | 3  | ANS221 Animal Structure and Function                | 3  |
| Year 2 | ANS230 Animal Production Systems II             | 3  | BIO257 Australian Biodiversity                      | 3  |
|        | CWB elective 1 (BIO245 or ENV328)               | 3  | ENV241 Ecology                                      | 3  |
|        | BIO356 Genetics & Evolution                     | 3  | CWB elective 2 (BIO244)                             | 3  |
|        |   |    | or Career Learning Spine or General Elective        |    |
|        |   | 12 |   | 12 |
|        | VET380 Veterinary Nutrition & Animal Toxicology | 3  | ANS337 Animal Industry Experience                   | 3  |
|        | ANS333 Animal Production Systems III            | 3  | BIO376 Wildlife Biology                             | 3  |
| n      | BIO375 Conservation Biology                     | 3  | CWB elective 2 (BIO244)                             | 3  |
| Year   |   |    | or Career Learning Spine or General Elective        |    |
| Ye     | CWB elective 2 (BIO245 or ENV328)               | 3  | Career Spine or General Elective                    | 3  |
|        | or Career Spine or General Elective             |    |   |    |
|        |   | 12 |   | 12 |

# Course Plan 2 – Semester 1 entry (no CHE140 exemption)

| Semester 1 |  | Semester 1 Semester 2 |   |    |
|------------|--|-----------------------|---|----|
|            | <b>BSC100</b> Building Blocks for Science Students         | 3                     | BIO152 Cell Biology                                 | 3  |
| Year 1     | MAS183 Statistical Data Analysis                           | 3                     | BMS107 Foundations of Vertebrate Form & Function    | 3  |
|            | CHE140 Fundamentals of Chemistry                           | 3                     | ANS101 Introduction to Livestock Science & Genetics | 3  |
|            | BIO103 Intro to Environmental Biology                      | 3                     | ENV102 Foundations of the Environment               | 3  |
|            |  | 12                    |   | 12 |
|            | VET272 Comparative Mammalian Biochemistry                  | 3                     | ANS221 Animal Structure and Function                | 3  |
|            | ANS230 Animal Production Systems II                        | 3                     | BIO257 Australian Biodiversity                      | 3  |
| ear 2      | CWB elective 1 (BIO245 or ENV328) or Career Learning Spine | 3                     | ENV241 Ecology                                      | 3  |
| ×          | BIO356 Genetics & Evolution                                | 3                     | CWB elective 2 (BIO244) or Career Learning Spine    | 3  |
|            |  | 12                    |   | 12 |
|            | VET380 Veterinary Nutrition & Animal Toxicology            | 3                     | ANS337 Animal Industry Experience                   | 3  |
| က          | ANS333 Animal Production Systems III                       | 3                     | CWB elective 2 (BIO244) or Career Learning Spine    | 3  |
| ear        | BIO375 Conservation Biology                                | 3                     | BIO376 Wildlife Biology                             | 3  |
| χ          | <b>CWB elective 2</b> (BIO245 or ENV328) or Career Spine   | 3                     | Career Spine  | 3  |
|            |  | 12                    |   | 12 |

# Course Plan 3 – Semester 2 entry with CHE140 exemption

## **Major Prerequisites: Chemistry Background**

The following course plan applies for students that are granted an exemption for CHE140.

| Semester 1 |   | Semester 2 |  |    |
|------------|---|------------|--|----|
|            |   |            | BIO152 Cell Biology                              | 3  |
| -          |   |            | BMS107 Foundations of Vertebrate Form & Function | 3  |
| Year       |   |            | ENV102 Foundations of the Environment            | 3  |
|            |   |            | ANS101 Intro to Livestock Science & Genetics     | 3  |
|            |   |            |  | 12 |
|            | BSC100 Building Blocks for Science Students     | 3          | ANS221 Animal Structure and Function             | 3  |
| 7          | MAS183 Statistical Data Analysis                | 3          | ENV241 Ecology                                   | 3  |
| Year       | ANS230 Animal Production Systems II             | 3          | BIO257 Australian Biodiversity                   | 3  |
| ۶          | BIO103 Intro to Environmental Biology           | 3          | Career Learning Spine or General Elective        | 3  |
|            |   | 12         |  | 12 |
|            | VET272 Comparative Mammalian Biochemistry       | 3          | ANS337 Animal Industry Experience                | 3  |
|            | ANS333 Animal Production Systems III            | 3          | CWB elective 2 (BIO244)                          | 3  |
| ar 3       |   |            | or Career Spine or General elective              |    |
| Year       | BIO375 Conservation Biology                     | 3          | BIO376 Wildlife Biology                          | 3  |
|            | BIO356 Genetics & Evolution                     | 3          | Career Learning Spine or General Elective        | 3  |
|            |   | 12         |  | 12 |
|            | VET380 Veterinary Nutrition & Animal Toxicology | 3          |  |    |
|            | CWB elective 1 (BIO245 or ENV328)               | 3          |  |    |
| 4          | or Career Spine                                 |            |  |    |
| Year       | CWB elective 2 (BIO245 or ENV328)               | 3          |  |    |
| ×          | or Career Spine or General Elective             |            |  |    |
|            | Career Learning Spine or General Elective       | 3          |  |    |
|            |   | 12         |  |    |

# Course Plan 4 – Semester 2 entry (no CHE140 exemption)

| Semester 1 |   | Semester 2 |  |    |
|------------|---|------------|--|----|
|            |   | ·          | CHE140 Fundamentals of Chemistry                 | 3  |
| Year 1     |   |            | BMS107 Foundations of Vertebrate Form & Function | 3  |
|            |   |            | ENV102 Foundations of the Environment            | 3  |
| ×          |   |            | ANS101 Intro to Livestock Science & Genetics     | 3  |
|            |   |            |  | 12 |
|            | BSC100 Building Blocks for Science Students     | 3          | MAS183 Statistical Data Analysis                 | 3  |
| 7          | BIO152 Cell Biology                             | 3          | ANS221 Animal Structure and Function             | 3  |
| Year       | ANS230 Animal Production Systems II             | 3          | ENV241 Ecology                                   | 3  |
| ×          | BIO103 Intro to Environmental Biology           | 3          | BIO257 Australian Biodiversity                   | 3  |
|            |   | 12         |  | 12 |
|            | VET272 Comparative Mammalian Biochemistry       | 3          | ANS337 Animal Industry Experience                | 3  |
|            | ANS333 Animal Production Systems III            | 3          | BIO376 Wildlife Biology                          | 3  |
| ar 3       | BIO375 Conservation Biology                     | 3          | CWB elective 2 (BIO244)                          | 3  |
| Year       |   |            | or Career Learning Spine                         |    |
|            | BIO356 Genetics & Evolution                     | 3          | Career Learning Spine                            | 3  |
|            |   | 12         |  | 12 |
|            | VET380 Veterinary Nutrition & Animal Toxicology | 3          |  |    |
|            | CWB elective 1 (BIO245 or ENV328)               | 3          |  |    |
| 4          | or Career Learning Spine                        |            |  |    |
| Year       | CWB elective 2 (BIO245 or ENV328)               | 3          |  |    |
|            | or Career Learning Spine                        |            |  |    |
|            | Career Learning Spine                           | 3          |  |    |
|            |   | 12         |  |    |

**Disclaimer:** This course plan is a <u>sample only</u> and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as per the online <u>Handbook</u>.