

This Crosswalk shows how classes match Job Series 0454 requirementsCompiled by Susan Edinger Marshall (Cal Poly Humboldt) REVISED 04 MAR 2023

(see <https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/0400/rangeland-management-series-0454>)

| University or college name     |                | Angelo State Univ.        | BYU                                 | Cal Poly San Luis Obispo                               | Chadron State College               | Colorado State Univ.                  | Fort Hays State Univ.             | Cal Poly Humboldt            | Kansas State Univ.              | Montana State Univ.                | New Mexico State Univ.     | North Dakota State Univ.           | OK State Univ.                         | Oregon State University                                 | South Dakota State Univ.           | So. Utah Univ.          | Tarleton State Univ.   |
|--------------------------------|----------------|---------------------------|-------------------------------------|--------------------------------------------------------|-------------------------------------|---------------------------------------|-----------------------------------|------------------------------|---------------------------------|------------------------------------|----------------------------|------------------------------------|----------------------------------------|---------------------------------------------------------|------------------------------------|-------------------------|------------------------|
| 18 BASIC PRINC.                | Course (units) | RWM 3331 (3)              | PWS 215 (3)                         | ASCI 239 (3)                                           | AGRI 242 (3)                        | RS300 (3)                             | BIOL 695 & 695L (4)               | RRS 306 (3)                  | AGRON 501 (1.5)                 | NRSRM 101 (3)                      | RGSC 2110 (3)              | RNG 136 (3)                        | NREM 3613 (3)                          | RNG 341 (3)                                             | Rang 205 (3)                       | RANG 3600 & 3605 (4)    | RNRM-3301-530 (3)      |
|                                | Course title   | Princ. of Range Manag.    | Princ. of Range Manag.              | Princ. of Range Manag.                                 | Princ. of Rangeland & Forage Manag. | Range. Conserv. & Stewardship         | Range. Manag. & Techniques Lab    | Wildland Res. Princip.       | Range Management                | Natural Resources Conservation     | Intro. to Range. Manag.    | Intro. to Range. Manag.            | Princ. of Range Manag.                 | Princ. of Rangeland Ecol. & Mgmt                        | Intro. to Range Manag.             | Range. Manag. & Lab     | Princ. of Range Manag. |
| 18 RANGE PLANTS                | Course (units) | RWM 3335 (3)              | PWS 330 (3)                         | BOT 313                                                | AGRI 339 & Lab (3)                  | RS312 (1)                             | BIOL 638 & 638L (4)               | RRS 360 (3)                  | AGRON 560 (1)                   | NRSRM 350 (3)                      | RGSC 316 (3)               | RNG 450/650 (3)                    | PBIO 4005 (5)                          | RNG 353 (4)                                             | Rang 210-210L (2)                  | RANG 3800 & 3805 (4)    | RNRM-3300-010 (3)      |
|                                | Course title   | Range Plants              | Range. Plant ID & Ecology           | Field Botany: California Plant Diversity               | Range Plant ID & Lab.               | Range Plant ID                        | Range. Plant Ecol. & Plant ID Lab | Wildland Plant Communities   | Field ID Range & Pasture Plants | Veg. of Western Wildlands          | Range. Plants              | Range Plants                       | Field Botany                           | Wildland Plant ID                                       | Range Plant ID & Lablab            | Range. Plant Ecol. & ID | Range & Forest Plants  |
| 18 RANGE ECOL.                 | Course (units) | RWM 4333 (3)              | PWS 350 (3)                         | ASCI 380 (3) *New course                               | AGRI 357 (3)                        | RS310 (3)                             | BIOL 637 (3)                      | RRS 370 (3)                  | AGRON 681 (3)                   | NRSRM 240 (3)                      | RGSC 440 (3)               | RNG 458/658 (3)                    | NREM 3013 & 3012 (5)                   | RNG 351 & RNG 352 (6)                                   | Rang 321 (3)                       | RANG 4200 (3)           | RNRM 3315-010 (3)      |
|                                | Course title   | Range Wildlife Management | Range. Ecology                      | Grazing Ecology & Management                           | Grazing Ecology                     | Forest & Range. Ecogeography          | Contemp. Range. Issues            | Wildland Ecology             | Range Ecology                   | Natural Resource Ecology           | Range. Res. Ecology        | Grazing Ecology                    | Applied Ecol. & Conserv. Lecture & lab | Ecol. of Grassland Ecosys. & Ecol. of Shrubland Ecosys. | Wildland ecosystems                | Wildland Ecology        | Range Ecology          |
| 18 RANGE INVENTORIES & STUDIES | Course (units) | RWM 4336 (3)              | PWS 355 (3)                         | ASCI 465 (4)                                           | AGRI 428 & Lab (3)                  | RS432 (3)                             |                                   | RRS 375 (3)                  | AGRON 660 & 661 (3)             | NRSRM 453 (3)                      | RGSC 452 (4)               | RNG 213 (3)                        | NREM 3813 (3)                          | RNG 441 (4)                                             | Rang 425-425L (3)                  |                         |                        |
|                                | Course title   | Range Invent. & Research  | Range. Veg. Measurements & Analysis | Applied Practices for Monitoring California Rangelands | Habitat Invent. & Analysis & Lab.   | Rangeland Measure. & Monitoring       |                                   | Vegetation Analysis & Health | Grassland Monitoring & Assess.  | Habitat Invent. & Analysis         | Veget. Measurements        | Range Sampling Techniques          | Biometrics (name change soon)          | Rangeland Monitoring & Analysis                         | Range. Assessment & Monitor. Lab   |                         |                        |
| 18 RANGE IMPROVEMENTS          | Course (units) | RWM 3332 (3)              | PWS 416 (3)                         | ASCI 370 (3)                                           | AGRI 334 (3)                        | RS452 (4)                             | BIOL 634 (3)                      | RRS 430 (3)                  | AGRON 501 (1.5)                 | ENSC 461 (3)                       | RGSC 325 (3)               | RNG 456 (3)                        | NREM 4783 and 4793 (3+3)               | RNG 421                                                 | Rang 374-374L (4)                  | RANG 4400 and 4405 (4)  | RNRM-4312-010 (3)      |
|                                | Course title   | Range Improvements        | Range.Veg. Improve.                 | Range Improvements                                     | Veg. Manipulation Practices         | Rangeland Herbivory Ecology & Manage. | Range. Restor. & Conserv.         | Wildland Restor. & Develop.  | Range Management                | Restoration Ecology                | Range. Restoration Ecology | Ecolog. Restoration                | Prescribed Fire & Adv.Prescribed Fire  | Rangeland Restoration & Management                      | Habitat Conserv. & Manage. Lab     | Wildland Restor. & Lab  | Range Improv. & Devel. |
| 18 RANCH OR RANGELAND PLANNING | Course (units) | RWM 6345 (3)              | PWS 417 (3)                         | ASCI 460 (3)                                           | AGRI 430 (3)                        | NR420 (4)                             |                                   | RRS 460 (3)                  | AGRON 790 (3)                   | WILD 420 (3)                       | RGSC 460 (4)               | RNG 462/662 (3)                    | NREM 4613 (3)                          | RNG 491                                                 | Rang 215 crosslisted as AS 215 (3) |                         |                        |
|                                | Course title   | Ranch & Livestock Manage. | Range.Planning & GIS                | Rangeland Assessment & Planning                        | Land Resource Manage. Planning      | Integrated Ecosystem Manage.          |                                   | Range & Ranch Planning       | Range Manage. Planning          | Range & Wildlife Policy & Planning | Range. Planning Manage.    | Natural Resource & Range. Planning | Range. Resources Planning              | Rangeland Managment Planning-principles and processes   | Intro.to Integrated Range Manage.  |                         |                        |

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|-------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------------|
| 18 OTHER COURSES IN THIS CATEGORY?                                                  | Course (units)      | RWM 4391 (3)                                                                                                             |                      | ASCI 372 (3); ASCI 490 (2)                                                          |                             |                                                                                                                                                                                              |                          |                          | AGRON 670 (variable)                       | NRSM 353 (3)                                                                                                      | RGSC 317 (3)                                                                                                       | RNG 451/651 (3)                      | NREM 4023 (3)                        | RNG 442 (4)                  | Rang 421 (3)                                                                                          | RANG 4000 (3)                                                                                    |                                  |
|                                                                                     | Course title        | Range Research                                                                                                           |                      | California Ranch & Rangeland Management; Rangeland Research & Management Enterprise |                             |                                                                                                                                                                                              |                          |                          | Range Management Problems                  | Grazing Ecology and Management                                                                                    | Rangeland Communities                                                                                              | Ecology of Fire-Dependent Ecosystems | Restoration Ecology                  | Rangeland-Animal Relations   | Grassland Fire Ecology                                                                                | Rangeland - Ungulate Animal Relations                                                            |                                  |
| 18 What other classes might be used in this category? Please explain the match-ups. | Open-Ended Response | RWM 6338 (Range Animal Nutrition (3)), RWM 6339 (Grazing Management (3)), RWM 6345 (Range and Livestock Management (3)). |                      |                                                                                     |                             | Basic Principles: NR220 - NR Ecol. & Manage. (3) Range Improvements: RS478 - Ecological Restoration (3 credits) Ranch/Range Planning: ANEQ472 - Sheep Systems (3) ANEQ478 - Beef Systems (3) |                          |                          | AGRON 762 Range Grasses (Range Plants) (2) | NRSM 330 - Fire Ecol and Management (Range Ecol class) (3) NRSM 351- Biomes of western woodlands (Range Ecol) (2) | BIOL 312 Plant Taxonomy or RGSC 448 Problems: Filed Rangeland Plants are substitutes for RGSC 316 Rangeland Plants |                                      | ANSI 4203 Range. & Pasture Util. (3) |                              | EES 425- EES 425L, Disturbance and Restoration Ecology and Lab (3) NRM 311, Principles of Ecology (3) | RANG 4890 - Internships in Range                                                                 |                                  |
| 15 PLANT SCIENCE                                                                    | Course (units)      | RWM 4435 (4)                                                                                                             | Bio 230 (4)          |                                                                                     | AGRI 141 (3)                | BZ223 (3)                                                                                                                                                                                    | BIOL 610 and 610L (4)    | BOT 350 (4)              | BIOL 500 (3)                               | BIOO 433 (3)                                                                                                      | RGSC 357 (3)                                                                                                       | BIOL 314 (3)                         | NREM 4033 (3)                        | BOT 331 (4)                  | Bot 301-301L (3)                                                                                      | AGSC 1110 & 1115 (4)                                                                             | BIOLOGY 1406 (4)                 |
|                                                                                     | Course title        | Plant Taxon.                                                                                                             | Plant Divers.        |                                                                                     | Intro. to Plant Science (3) | Plant ID                                                                                                                                                                                     | Flower. Plant Tax. & Lab | Plant Taxonomy           | Plant Physiol.                             | Plant Physiol.                                                                                                    | Grass Tax.                                                                                                         | Plant Systematics                    | Ecol. of Invasive Species            | Plant Physiology             | Plant Systematics                                                                                     | Crop Prod. & Lab                                                                                 | Basic Biology                    |
| 15 PLANT SCIENCE (add'l)                                                            | Course (units)      | RWM 2321 (3)                                                                                                             | Bio 235 (3)          |                                                                                     | BIOL 439 (3)                | RS209 (3)                                                                                                                                                                                    | BIOL 150 and 150L (4)    | BOT 105 (4)              | BIOL 551 (4)                               | AGSC 454 (3)                                                                                                      | EPWS 314 (3)                                                                                                       | BIOL 460/660 (3)                     | NREM 4990 (3)                        | BOT321 (4)                   | BOT 303-303L (3)                                                                                      | AGSC 3030 & 3035 (4)                                                                             | AGRI 1307 (3)                    |
|                                                                                     | Course title(s)     | Forage Prod. & Utiliz.                                                                                                   | Field Botany         |                                                                                     | Plant Physiol. & Lab        | Intro. to Forest & Range. Ecology                                                                                                                                                            | Botany and Lab           | Intro. Botany            | Taxonomy Flowering Plants                  | Agrostology                                                                                                       | Plant Physiol.                                                                                                     | Plant Ecology                        | Herb. Plants Great Plains            | Plant Systematics            | Forest Ecol. & Management                                                                             | Forage Crops & Lab                                                                               | Fund. of Agron.                  |
| 15 PLANT SCIENCE (add'l)                                                            | Course (units)      |                                                                                                                          | Bio 430 (3)          |                                                                                     | BIOL 336 and lab (3)        | RS310 (3)                                                                                                                                                                                    | AGRI 112 and 112L (4)    | BOT 354 (4)              | BIOL 529 (3)                               | Bioo 233 (4)                                                                                                      |                                                                                                                    | BOT 372 (3)                          |                                      | BOT341 (4)                   | PS 313 (3)                                                                                            | BIOL 2050 (3), BIO 3510 & 3513 (4), BIOL 3530 & 3535 (4), and BIOL 3550 & 3555 (4)               | BIOLOGY 3415 or BIOLOGY 3436 (4) |
|                                                                                     | Course title(s)     |                                                                                                                          | Plant Classification |                                                                                     | General Ecology & lab.      | Forest & Range. Ecogeography                                                                                                                                                                 | Agron.Crop Science &Lab  | Agrostology              | Ecology                                    | ID of Seed Plants                                                                                                 |                                                                                                                    | Struct. & Divers. of Plants &Fungi   |                                      | Plant Ecology                | Forage Crop & Pasture Manage.                                                                         | S. UT Flora, Plant Anatomy and Diversity & Lab, Plant Physiology & Lab, and Plant Taxonomy & Lab | Plant Tax. or Plant Physiol.     |
| 15 ANIMAL SCIENCE                                                                   | Course (units)      | ASCI 1319 (3)                                                                                                            | PWS 270 (3)          |                                                                                     | AGRI 132 (3)                | RS300 (3)                                                                                                                                                                                    | BIOL 651 and 651L (4)    | RRS 420 (3)              | ASI 515 (3)                                | ANSC 100 (3)                                                                                                      |                                                                                                                    | ANSC 114 (3)                         | ANSI 1124 (4)                        | ANS446 (4)                   | AS 101 - AS101L (4)                                                                                   | AGSC 1100 (3)                                                                                    | BIOLOGY 1406 (4)                 |
|                                                                                     | Course title        |                                                                                                                          | Animal Husbandry     |                                                                                     | Intro. to Animal Science    | Range. Conservation & Stewardship                                                                                                                                                            | Mammalogy & Lab          | Intro. to Animal Science | Beef Science                               | Intro. to Animal Science                                                                                          |                                                                                                                    | Intro.to Animal Sciences             | Intro. to Animal Science             | Grazing livestock production | Intro. to Animal Science                                                                              | Princ. of Animal Science                                                                         | Basic Biology                    |

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|                                       | Course title(s) | Animal Nutrition   | Comparative Animal Nutrition                             |  | Principles of Animal Nutrition          | Range, Herbivory Ecology & Manage. | Ornithology and Lab    |                                     | Ruminant Nutrition            | Livestock in Sustainable Systems | Introduction to Animal Metabolism  | Animal Production                | Principles of Animal Nutrition              | Principles of Animal Nutrition     | Survey of Animal Nutrition                        | Feed & Nutr. of Livest. & Horses Lab                                                                                                                     | Animal Sci & Vet. Tech.?                                                                                                                             |
| 15 ANIMAL SCIENCE (add'l)             | Course (units)  | ASCI 4343 (3)      |                                                          |  |                                         |                                    | AGRI 111 and 11L (4)   |                                     | ASI 683 (1)                   | WILD 325 (3)                     | ANSC 1120 (3)                      | ANSC 223 (3)                     | ANSI 4613 (3)                               | ANS445 (4)                         | WL 220 (3)                                        | AGSC 2630 (2), AGSC 2640 (2), AGSC 2650 (2), BIOL 3390 & 3395 (4), BIOL 3470 & 3475 (4), and BIOL 3490 & 3495 (4)                                        | ANSC 2350, ANSC 3409, ANSC 3319, ANSC 3308, ANSC 3309,                                                                                               |
|                                       | Course title(s) | Beef Cattle        |                                                          |  |                                         |                                    | Animal Science and Lab |                                     | Grazing Livestock Nutrition   | Wildlife-Livestock Nutrition     | Introduction to Animal Science     | Introduction to Animal Nutrition | Beef Cow-Calf Management                    | Beef Production Systems            | Introduction to Wildlife and Fisheries Management | Horse Production Practices, Livestock Production Practices, Livestock Production Practices II, Mammalogy & Lab, Herpetology & Lab, and Ornithology & Lab | Anatomy & Physiology of Domestic Animals, Genetics, Animal Breeding, Principles of Animal Nutrition, Applied Animal Nutrition & Feeding Meat Science |
| 15 SOIL SCIENCE                       | Course (units)  | RWM 2321 (3)       | PWS 282 & 283 (3+1)                                      |  | AGRI 245 and Lab (4)                    | SOCR240 (4)                        | AGRI 215 (4)           | SOIL 260 (3)                        | AGRON 665 (3)                 | ENSC 245 (3)                     | SOIL 2110 (3)                      | SOIL 210 (3)                     | SOIL 1124 (4)                               | SOIL 205 & 206 (4)                 | PRAG 410-410L (3)                                 | AGSC 3506 & 3565 (4)                                                                                                                                     | SOIL 3301 (3)                                                                                                                                        |
|                                       | Course title    | Rangeland Soils    | General Soils Lab                                        |  | Principles of Soil Science & laboratory | Introo. Soil Science               | Soils                  | Intro to Soil Science (3)           | Soil Genesis & Classification | Soils                            | Introduction to Soil Science       | Introduction to Soils            | Fundamentals of Soil Science                | Introduction to Soil Science & Lab | Soil Geography and Land Use Interpretation        | Soils and Lab                                                                                                                                            | Soil Science                                                                                                                                         |
| 15 Soil Sciences SOIL SCIENCE (add'l) | Course (units)  | Geol 3301 (3)      | PWS 440 (3)                                              |  | AGRI 436 (3)                            | SOCR440 (4)                        |                        | SOIL 360 (3)                        |                               | ENSC 454 (3)                     | SOIL 2110L (1)                     | SOIL 410/610 (3)                 | SOIL 3433 (3)                               | SOIL 466                           | PS 462-462L (3)                                   | AGSC 3700 & 3705 (4)                                                                                                                                     | SOIL 3412 (3)                                                                                                                                        |
|                                       | Course title(s) | Hydrology          | Plant Physiology                                         |  | Rangeland and Fire Ecology              | Pedology                           |                        | Origin and Classification of Soils  |                               | Landscape Pedology               | Introduction to Soil Science Lab   | Soils and Land Use               | Soil Genesis, Morphology and Classification | Soil Morphology                    | Environmental Soil Management                     | Principals of Irrigated Soils and Lab                                                                                                                    | Soil genesis, Morphology, and Classification                                                                                                         |
| 15 Soil Sciences SOIL SCIENCE (add'l) | Course (units)  |                    | PWS 511 (3)                                              |  |                                         | SOCR442 (3)                        |                        | SOIL 460 (3)                        |                               |                                  | SOIL 472 (4)                       | SOIL 444/644 (3)                 | SOIL 4363 (3)                               | Soil 366                           | PS 213-213L (3)                                   |                                                                                                                                                          |                                                                                                                                                      |
|                                       | Course title(s) |                    | Environmental Biophysics: Soil and Plant Water Relations |  |                                         | Forest and Range Soils             |                        | Soil Management and Erosion Control |                               |                                  | Soil morphology and classification | Soil Genesis and Survey          | Soil, Water and Weather                     | Ecosystems of Wildland Soils       | Soils                                             |                                                                                                                                                          |                                                                                                                                                      |

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| 15 Directly Related Plant, Animal, and Soil Science What other classes might be used in this category? | Open-Ended Response      |                     |                                                 |  |                                        | Plant Science: RS351 - Wildland Ecosystems in a Changing World (3) | AGRI 306 Forage Crops (Plant Science) (3) AGRI 408 Sheep Production and Management (Animal Science) (3) AGRI 610 Beef Cattle Production and Management (Animal Science) (3) |                                  |                                       |                                   | RGSC/ANSC 458 Livestock Behavior, Welfare and Handling - (3); ANSC 304 Feeds and Feeding -(3); ANSC 426 Beef Production Cow/Calf Management - (3) | All (3) BIOL 315 - Genetics ANSC 324 - Applied Animal Nutrition SOIL 351 - Soil Ecology SOIL 465/665 - Soil and Plant Analysis SOIL 433/633 Soil Ecohydrology and Physics | ANSI 4633 Stocker and Feedlot Cattle Management (3) |                                                 | PS 412, Environmental Soil Chemistry (3) |                                              |                                   |
| 9 Related Resource Management Studies                                                                  | Course (units)           | RWM 4331 (3)        | PWS 225 (3)                                     |  | AGRI 348 (3)                           | FW104 (3)                                                          | BIOL 695 and 695L (4)                                                                                                                                                       | WSHD 310 (4)                     | AGRON 305 (4)                         | AGSC 342 (3)                      | RGSC 318 (3)                                                                                                                                      | RNG 453/653 (3)                                                                                                                                                           | NREM 3503 (3)                                       | RNG455 (4)                                      | ABS 475-475L (3)                         | NR 1010 (3)                                  | AAEC 2317 (3)                     |
|                                                                                                        | Course title             | Wildlife Techniques | Principles of Wildlife and Fisheries Management |  | Rangeland Hydrology                    | Wildlife Ecology & Conservation                                    | Rangeland Management and Techniques Lab                                                                                                                                     | Watershed Management             | Soils                                 | Forages                           | Watershed Management                                                                                                                              | Rangeland Resources Watershed Management                                                                                                                                  | Wildlife Management                                 | Riparian ecohydrology and management            | Integrated Natural Resource Management   | Introduction to Natural Resources Management | Fundamentals of ag. & Appl. Econ. |
| 9 Related Resource Management Studies                                                                  | Course prefix and number | RWM 4334 (3)        | PWS 411 (3)                                     |  | AGRI 235 (3)                           | AREC202 (3)                                                        | BIOL 697 and 697L (4)                                                                                                                                                       | FOR 315 (3)                      | AGRON 550 (3)                         | WILD 301 (3)                      | RGSC 302V (3)                                                                                                                                     | NRM/RNG/SOI L 454/654 (3)                                                                                                                                                 | AGEC 1113 (3)                                       | RNG 121 (4)                                     | NRM 119 (2)                              | NR 3000 (3)                                  |                                   |
|                                                                                                        | Course title             | Big Game Management | Watershed Management                            |  | Introduction to Wildlife Management    | Agricultural Resource Economics                                    | Wildlife Management and Lab                                                                                                                                                 | Forest Management                | Forage Management & Utilization       | Princ. of Fish & Wildlife Manage. | Forest and Society                                                                                                                                | Wetland Resources Management                                                                                                                                              | Intro. to Ag. Economics                             | Wildland Plant Ecology                          | Orient. to Natural Res. Manage.          | Wildlife Ecology and Management              |                                   |
| 9 Related Resource Management Studies                                                                  | Course (units)           | Biol 4451 (4)       | PWS 419 (3)                                     |  | AGRI 330 (3)                           | F311 Forest Ecology (3)                                            | BIOL 699 and 699L (4)                                                                                                                                                       | ESM 215 (3)                      | AGEC 120 (3)                          | NRSM 455 (3)                      | FWCE 1110G (4)                                                                                                                                    | NRM 402/602 (3)                                                                                                                                                           | NREM 4353 (3)                                       | RNG 457 (4)                                     | NRM 230 (2)                              | AGSC 3020 (3)                                |                                   |
|                                                                                                        | Course title             | Ecology             | Forest Management and Ecology                   |  | Agriculture economics and agribusiness |                                                                    | Fisheries Management and Lab                                                                                                                                                | Natural Resources and Recreation | Agricultural Economics & Agribusiness | Riparian Ecology and Management   | Introduction to Natural Resource Management                                                                                                       | River and Stream Resource Manage.                                                                                                                                         | Natural Resource Recreation                         | Habitat Analysis I: Habitat Use and Movement    | Natural Resource Management Techniques   | Agribusiness Management                      |                                   |
| 9 Related Resource Management Studies                                                                  | Course (units)           | Geol 3371 (3)       | PWS 357 (3)                                     |  | GEOS 322 (3)                           | BZ471 (3)                                                          |                                                                                                                                                                             | WLDF 301 (3)                     |                                       | WILD 438 (3)                      | FWCE 2110 (3)                                                                                                                                     | NRM 452/652 (3)                                                                                                                                                           | NREM 4413 (3)                                       | FW340 (3)                                       | NRM 300 (3)                              | AGSC 4100 (3)                                |                                   |
|                                                                                                        | Course title(s)          | GIS (Geomapping)    | Techniques for Wildlife Invest. & Manage.       |  | Introduction to GIS                    | Stream Biology & Ecology                                           |                                                                                                                                                                             | Principles of Wildlife           |                                       | Wildlife Habitat Ecology          | Principles of Fish and Wildlife Management                                                                                                        | Managing Nat. & Range. Res. using GIS                                                                                                                                     | Watershed Hydrology and Water Quality               | Multicultural perspectives in Natural Resources | Laws and Policies in NR Manage.          | Beef Cattle Management                       |                                   |

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| 9 Related Resource Management Studies | Open-Ended Response |                    |     |  |                       | WR204 Sustainable Watersheds (3)<br>NR320 Natural Resources History and Policy (3) |                       | ECON 423 Environmental and Natural Resource Economics (3) |                    | GPHY 284 - Intro to GIS (3) | Only RGSC 318 is required. 6 additional credits may include: FWCE 1110G Intro. NR Manage.(3), FWCE 2110 Princ. Fish & Wild. Manage. (3) AEEC 337V Natural Resource Econ. (3) AEEC 384V Water Resource Econ. (3) | NRM 431/631 - National Environmental Policy Act & Environmental Impact Assessment (3) | NREM 4603 Ecotour. & Wilderness Manage. (3 ); NREM 2083 or GEOG 4203 GIS course (3); NREM 4001 Issues in Global Change (1); NREM 4043 NR Admin. & Policy (3); NREM 4613 Rangeland Res. Plan.(3) | CROP 440 (4) Weed Management; FES440 (4) Wildland Fire Ecology; FOR111 (3) Intro. to Forestry; FW251 Principles of Fish & Wildlife Management; FW326 Integrated Watershed Management; RNG355 (4) Desert Watershed Management; TRAL 351 (3) Outdoor Recreation Management on Public Lands; CROP310 (4) Forage Production; FOR346 (4) Topics in Resource Management | AGEC 271, Farm and Ranch Management | ORPT 3030 (3) Foundations of Recreation Resources Management & AGSC 4250 (3) Sheep Management |                      |

| Texas A&M Univ. College Station               | Texas Christian Univ. | Texas Tech Univ.                               | Univ. of Arizona                                                             | Univ. of CA at Berkeley                | Univ. of CA at Davis  | Univ. of Idaho                                                    | Univ. of NE Lincoln                   | Univ. of Nevada Reno             | University of Wyoming                         | Utah State Univ.                          | Eastern WY College     | Shasta College              | Sheridan College         | Bakersfield College |
|-----------------------------------------------|-----------------------|------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------|-----------------------|-------------------------------------------------------------------|---------------------------------------|----------------------------------|-----------------------------------------------|-------------------------------------------|------------------------|-----------------------------|--------------------------|---------------------|
| RWFM 314 (3)                                  | RAMA 50503 (3)        | NRM-3304 (3)                                   | RNR 384 (3),<br>RAM 389 (2)                                                  | ESPM 186 (4)                           |                       | REM 151 (3)                                                       | NRES 220 (3)                          | REM 241 (3)                      | REWM 2000 (3)                                 | WATS 2220 (3)                             | REWM 2000 (3)          | AGNR 4 (3)                  | REWM 2000 (3)            | NRES B1 (3)         |
| Princ. of Range Manag. Around the World       | Range Management      | Princ. of Range Manag.                         | Nat. Res. Manag. Practices (1 unit to range), Principles of Range Management | Manag. & Conserv. of Range. Ecosystems |                       | Range. Principles                                                 | Princ. of Ecology                     | Princ. of Range Manag.           | Principles of Rangeland Management            | General Ecology                           | Princ. of Range Manag. | Wildlands and Range Ecology | Princ. of Range Manag.   | Range Management    |
| RWFM 302 (3)                                  | RAMA 50503 (3)        | NRM-3403 (4)                                   | RNR 230 (3),<br>RAM 370 (2)                                                  | IB 102 & L (4)                         | PLS 102 & L           | REM 252 &<br>REM 253 (2+1)                                        | AGRO 442 (3)                          | NRES 345 (3)                     | REWM 2400 (4)                                 | WILD 3830 (3)                             | REWM 2500 (2)          |                             | REWM 2420 (2)            |                     |
| Wildland Plants of North America              | Range Manag.          | Range, Forest, & Wetland Veg. in North America | Field Botany, Wildland Plants of North America                               | Intro. to CA Plant Life                | California Floristics | Wildland Plant ID & Wildland Plant ID Field Studies               | Wildland plants                       | Range & Forest Plants            | Range Ecosystems and Plants                   | Range. Plants & Taxonomy                  | Range Plant ID         |                             | Range. Plant Taxon.      |                     |
| RWFM 316 (3)                                  |                       | NRM-3302 (3)                                   | RAM 382;<br>RAM436a (3+2)                                                    | ESPM 116B (4)                          | PLS 130               | REM 459 (3)                                                       | AGRO 245 (3)                          | AGSC 408 (5)                     | LIFE 3400                                     | WILD 3800 (4)                             |                        |                             | Range. Ecosystems (2)    |                     |
| Range Ecology                                 |                       | Range Plant Ecology                            | Range. Plant Communities; Grazing Ecol. & Manage.                            | Ecology of Grasslands & Woodlands      | Grassland Ecology     | Range. Ecology                                                    | Intro. to Grassland Ecology & Manage. | Range. Ecosystems                | General Ecology                               | Wildland Plants & Ecosystems              |                        |                             | REWM 2410                |                     |
| RWFM 313 (3)                                  |                       | NRM-3301 (3)                                   | RAM 456a (4)                                                                 | ESPM 278 &<br>ESPM 72 (3+3)            |                       | REM 410 &<br>REM 460 (2+1)                                        | AGRO 440 (3)                          | REM 411 (3)                      | REWM 4330 (4)                                 | WILD 4750 (4)                             |                        |                             | REWM 2350 (1)            |                     |
| Veg. Sampling Methods & Designs in Ecosystems |                       | Veg. Invent. & Analysis                        | Range. Inventory & Monitoring                                                | Range. Assessment/ GIS                 |                       | Princ. of Veg. Monitor. & Meas. & Integr. Field Studies in Range. | Ecosystem Monitoring & Assessment     | Range. Vegetation Measurements   | Rangeland Ecosystem Assessment and Monitoring | Monitoring & Assessment in Nat. Res. Mgt. |                        |                             | Range & Pasture Monitor. |                     |
| RWFM 317 (3)                                  |                       | NRM-4302 (3)                                   | RAM 446 (4)                                                                  | ESPM 280 (3)                           |                       | REM 280 &<br>PLSC 419 (2+2)                                       | AGRO 340 (3)                          | REM 498 (3)                      | REWM 4850 (3)                                 | WILD 3850 (3)                             |                        |                             |                          |                     |
| Veg. Manage.                                  |                       | Range Improvements                             | Restor. & Manage. of Wildland Veg.                                           | Range Planning & Policy                |                       | Intro. to Wildland Restor. & Plant Comm. Restor. Methods          | Range Manage. & Improve.              | Range. Restor. Ecology           | Rangeland Vegetation Management Techniques    | Vegetation & Habitat Mgt.                 |                        |                             |                          |                     |
| RWFM 415 (4)                                  |                       | NRM-4303 (3)                                   | RAM 487 (2)                                                                  | ESPM 280 (3)                           |                       | REM 456 (3)                                                       | NRES 438 (3)                          | REM 494 (3)                      | REWM 4900 (3)                                 | WILD 4000 (3)                             |                        |                             |                          |                     |
| Range Analysis & Manage. Planning             |                       | Range & Wildlife Analys. & Manage. Planning    | Range. Manage. Plannin g                                                     | Range Planning & Policy                |                       | Integrat. Range. Manage.                                          | Grassl. Conserv. Planning & Manage.   | Range & Forest Admin. & Policies | Rangeland Management Planning                 | Princ. of Range Mgt.                      |                        |                             |                          |                     |

| Texas A&M Univ.                                                                                                                                                                                                                                                        | Texas Christian Univ.    | Texas Tech Univ.                                                                                            | Univ. of Arizona              | Univ. of CA at Berkeley                                                                                                                                                                                                                                                                       | Univ. of CA at Davis                                       | Univ. of Idaho              | Univ. of NE Lincoln         | Univ. of Nevada Reno                                                                                                                                                                                                                 | University of Wyoming                                 | Utah State Univ.                  | Eastern WY College       | Shasta College | Sheridan College                      | Bakersfield College                   |
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| RWFM 301 (3)                                                                                                                                                                                                                                                           |                          | NRM-3323 (3)                                                                                                |                               | ESPM 278 (3)                                                                                                                                                                                                                                                                                  |                                                            |                             | AGRO 440 (3)                |                                                                                                                                                                                                                                      | REWM 4830 (3)                                         | WILD 4910 (3)                     |                          |                | REWM 1005 (2)                         | FORE B2 (3)                           |
| Wildland Watershed Management                                                                                                                                                                                                                                          |                          | Prescribed Burning                                                                                          |                               | Rangeland Assessment                                                                                                                                                                                                                                                                          |                                                            |                             | Great Plains Ecosystems     |                                                                                                                                                                                                                                      | Ecological Applications of Wildland Management        | Assessment and Synthesis in NR    |                          |                | Survey of Natural Resource Management | Natural Resources and the Environment |
| ECCB 303 Agrostol. (3)<br>ECCB 304 Range. Plant Tax. (3)<br>ECCB 320 Ecosyst. Rest. & Manage. (3)<br>RWFM 440 Wetland Delin. (3)<br>RWFM 349 Range. & Wildlife Animal Nutr. (3) -<br>RWFM 401 Range. Plant & Herbiv. Dyn. (3)<br>-ECCB 416 Fire Ecol. & NR Manage. (3) |                          | NRM 3300 GIS for NR Manage. (3)<br>BOT/NRM (4)<br>3401 Plant Physiology<br>NRM 3309 Restoration Ecology (3) |                               | ESPM 121 Devel. & Classif. of Soils (3)<br>ESPM 120 Sci. of Soils (3)<br>ESPM 134 Fire, insects, & disease in wildland ecosystems (3)<br>ESPM C172 Remote sensing Environ. (3)<br>ESPM 102BL Lab. in NR Sampling (2)<br>ESPM 252: Seminar in Forest & Wildland Resource Policy & Analysis (3) |                                                            |                             |                             | Range Plants: REM 408 Range. Ecosyst. (5)<br>Range Ecology: BIOL 314 Ecol. & Pop. Biol. (3), NRES 217 NR Ecology (3)<br>Inventory/Improvements/Planning: REM 499 Riparian Manage. & Restoration (3)<br>PSC 403C: Environ. Policy (3) | REWM 4530 (Range or Watershed Seminar; 1)             | WILD 1800 (3) Introduction to GIS |                          |                |                                       |                                       |
| RWFM 202 (3)                                                                                                                                                                                                                                                           | RAMA 40904 (3)           | PSS 3323 (3)                                                                                                | PLS 360 (3)                   | EPSM 111 (4)                                                                                                                                                                                                                                                                                  | PLS 157                                                    | BOT 205 (4)                 | AGRO 215 (3)                | NRES 406 (4)                                                                                                                                                                                                                         | REWM 3000 (4)                                         | WILD 2400 (1.5)                   | AECL 1000 (4)            | AGPS 20 (3)    | BIOL 2400/BIOL 2410 (3+2)             | CRPS B5 (3)                           |
| Conc. in Appl. Plant Biol.                                                                                                                                                                                                                                             | Forage Prod. & Use       | Crop Physiol.                                                                                               | Plant Growth & Physiol.       | Ecosystem Ecology                                                                                                                                                                                                                                                                             | Physiology of Environmental Stresses in Plants             | General Botany              | Genetics                    | Plant Ecophysiology                                                                                                                                                                                                                  | Plant Ecophysiology: Plant Form and Function          | Wildland Res. Techniques          | Agroecology              | Plant Science  | General Ecology/ Field Ecology        | Plant Science                         |
|                                                                                                                                                                                                                                                                        |                          | NRM 4304 (3)                                                                                                | ECOL 472 (4)                  | ESPM 105A (4)                                                                                                                                                                                                                                                                                 | PLS 158                                                    | REM 341 (3)                 |                             |                                                                                                                                                                                                                                      | LIFE 2023 (4)                                         | WILD 3810 (1.5)                   |                          |                |                                       |                                       |
|                                                                                                                                                                                                                                                                        |                          | Fire Ecology & Manage.                                                                                      | Systematic Botany             | Sierra Nevada Ecology                                                                                                                                                                                                                                                                         | Mineral Nutrition of Plants                                | Systematic Botany           |                             |                                                                                                                                                                                                                                      | Biology of Plants and Fungi                           | Plant & Animal Populations        |                          |                |                                       |                                       |
|                                                                                                                                                                                                                                                                        |                          | NRM 4314                                                                                                    | PLS 359                       | INTEGBI 157LF                                                                                                                                                                                                                                                                                 | PLS 147, PLS 176                                           |                             | AGRO 325                    |                                                                                                                                                                                                                                      | RNEW 4130 (3)                                         | BIOL 4400                         |                          |                |                                       |                                       |
|                                                                                                                                                                                                                                                                        |                          | Watershed Planning                                                                                          | Plant Cell Struct. & Function | Ecosystems of California                                                                                                                                                                                                                                                                      | California Plant Communities, Introduction to Weed Science |                             | Intro. Plant Physiol.       |                                                                                                                                                                                                                                      | Applied Remote Sensing for Agricultural Management    | Plant Physiol.                    |                          |                |                                       |                                       |
| ANSC 107 (3)                                                                                                                                                                                                                                                           | RAMA 40303 (3)           | ANSC 4406 (4)                                                                                               | ACBS 336 (3)                  | ESPM 106 (3)                                                                                                                                                                                                                                                                                  | ANS 112                                                    | AVS 110 (3)                 | AGRO 447 (4)                | AGSC 413 (3)                                                                                                                                                                                                                         | REWM 4100 (4)                                         | WILD 2400 (1.5)                   | ANSC 1010 (4)            | ANSC 19 (3)    | ANSC 1010 (4)                         | ANSC B1 (3)                           |
| General Animal Science                                                                                                                                                                                                                                                 | Animal Health Management | Sheep & Goat Production                                                                                     | Applied Animal Nutrition      | American Wildlife: Management & Policy in the 21st Century                                                                                                                                                                                                                                    | Sustainable Animal Agriculture                             | Science of Animal Husbandry | Great Plains Field Pedology | Range-livestock Interactions                                                                                                                                                                                                         | Nutritional Ecological Management of Range Herbivores | Wildland Resource Techniques      | Intro. to Animal Science | Animal Science | Intro to Animal Science               | Introduction to Animal Science        |

| Texas A&M Univ.              | Texas Christian Univ.        | Texas Tech Univ.                  | Univ. of Arizona                                   | Univ. of CA at Berkeley                      | Univ. of CA at Davis                                                           | Univ. of Idaho                           | Univ. of NE Lincoln                | Univ. of Nevada Reno            | University of Wyoming                            | Utah State Univ.                                    | Eastern WY College           | Shasta College  | Sheridan College      | Bakersfield College          |
|------------------------------|------------------------------|-----------------------------------|----------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------|------------------------------------|---------------------------------|--------------------------------------------------|-----------------------------------------------------|------------------------------|-----------------|-----------------------|------------------------------|
| General Animal Science Lab.  | Beef Cattle Prod.            | Wildlife& Livestock Nutrition     | Princ. of Animal Nutrition                         | Wildlife Ecology                             | Animal Growth and Development                                                  | The Science of Animals that Serve Human. | Livest. Manage. on Range & Pasture | Beef Cattle Manage              |                                                  | Plant & Animal Populations                          |                              | Livestock Prod. |                       | Beef Production              |
| ANSC 302 (3)                 | RAMA 30703 (3)               | ANSC 3301 (3)                     | ACBS 405 (3)                                       | INTEGRI 31 (3)                               | ANS 135, ANS 144                                                               | AVS 474 (3)                              | NRES 311 (3)                       | AGSC 206 (3)                    |                                                  | ADVS 2080 (3)                                       |                              |                 |                       | ANSC B6 (3)                  |
| Basic Beef Cattle Production | Animal Nutrition and Feeding | Principles of Nutrition           | Principles of Livestock Health Management          | The Ecology and Evolution of Animal Behavior | Production of Animal Laboratory, Beef Cattle and Sheep Production              | Beef Cattle Science                      | Wildlife Ecology and Management    | Fundamental of Animal Nutrition |                                                  | Beef and Dairy Herd Health and Production Practices |                              |                 |                       | Applied Animal Nutrition     |
| SCSC 301 (4)                 | RAMA 30403 (3)               | PSS 2432 (4)                      | ENVS 200, 201 (4)                                  | ESPM 120 (3)                                 | SSC 100                                                                        | SOIL 205 (3)                             | AGRO 153 (4)                       | NRES 497 (3)                    | SOIL 2010 (4)                                    | PSC 3000 (4)                                        | SOIL 2010 (4)                | AGPS 24 (3)     | SOIL 2010 (4)         | SOIL B1 (3)                  |
| Soil Science                 | Soil and Water Conservation  | Principles and Practices in Soils | Soil Science                                       | ESPM 120 Science of Soils 3 Units            | Principles of Soil Science                                                     | The Soil Ecosystem                       | Soil Resources                     | Forest and RAnge Soils          | Introduction to Soil Science                     | Fundamentals of Soil Science                        | Introduction to Soil Science | Soils           | Intro to Soil Science | Introduction to Soil Science |
|                              |                              | PSS 4332 (3)                      | ENVS 431 (3)                                       | ESPM 121 (3)                                 | SSC 102                                                                        | SOIL 206 (1)                             |                                    | NRES 322 (4)                    | SOIL 4120 (4)                                    | PSC 5130 (4)                                        | SOIL 2200 (2)                |                 |                       |                              |
|                              |                              | Soil Classification               | Soil Morphology, Classification and Interpretation | Development and Classification of Soils      | Environmental Soil Chemistry                                                   | The Soil Ecosystem Lab                   |                                    | Intro to soils                  | Genesis, Morphology, and Classification of Soils | Soil Genesis, Morphology, and Classification        | Applied Soils                |                 |                       |                              |
|                              |                              | PSS 3321 (3)                      | ENVS 300 (3)                                       | EPS 101 (4)                                  | SSC 107, SSC 109, SSC 111, SSC 112                                             | SOIL 454                                 |                                    |                                 |                                                  |                                                     |                              |                 |                       |                              |
|                              |                              | Forage and Pasture Crops          | Soil Ecology of Sustainable Systems                | Field Geology and Digital Mapping            | Soil Physics, Sustainable Nutrient Management, Soil Microbiology, Soil Ecology | Pedology (3)                             |                                    |                                 |                                                  |                                                     |                              |                 |                       |                              |

| Texas A&M Univ.                             | Texas Christian Univ. | Texas Tech Univ.                                            | Univ. of Arizona                                                                     | Univ. of CA at Berkeley                                                                                                                                                                              | Univ. of CA at Davis                                   | Univ. of Idaho                                   | Univ. of NE Lincoln                             | Univ. of Nevada Reno            | University of Wyoming                                                                                                                                                                                                                                                                                                     | Utah State Univ.                                                                                                                                                                                  | Eastern WY College         | Shasta College                  | Sheridan College                 | Bakersfield College                |
|---------------------------------------------|-----------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------|-------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------|----------------------------------|------------------------------------|
|                                             |                       | NRM 1401 - Introduction to Natural Resources Management (4) | Animal Sci: ACBS 477 Beef Resources Management (3) also ACBS 315R (3), ACBS 480B (1) | ESPM 134 Fire, Insects, Disease in Wild. Ecosyst. (3) ESPM 280 Fire Ecol. Sem. (3) ESPM 102BL Lab. In NR Sampling (2) ESPM 115C Fish Ecol. (3) ESPM 114 Wildlife Ecol. (3) ESPM 113 Insect Ecol. (2) |                                                        |                                                  |                                                 |                                 | LIFE 2022 (Animal Biology, 4); REWM 4000 (Poisonous Plants and Plant Toxins, 3); SOIL 4150 (Forest and Range Soils, 3); REWM 4200 (Reclamation of Drastically Disturbed Lands, 3); REWM 4440 (Applied Fire Ecology, 3); REWM 4580 (Rangeland Restoration Ecology, 3); REWM 4750 (Wildlife Habitat Restoration Ecology, 3) | Plant Science- PSC 3500 Struct. & Funct. of Plants (3) PSC 5550 Fund. of Integrated Weed Manage. (4) Animal Science- ADVS 2090 Sheep Prod. Practices (2) WILD 4340 Range Rum. Nutr. & Manage. (3) |                            |                                 |                                  | CRPS B2- Forage Crops (3)          |
| RWFM 101 (1)                                |                       | NRM 4309 (3)                                                | RNR 448 (3)                                                                          | ESPM C104 (4)                                                                                                                                                                                        | ANS 128                                                | WLF 411 (2)                                      | SCIL 101 (3)                                    | NRES 310 (4)                    | REWM 3100 (3)                                                                                                                                                                                                                                                                                                             | WATS 3700 (3)                                                                                                                                                                                     | REWM 2100 (3)              | AGNR 1 (3)                      | REWM 2390 (1)                    | FORE B7- Wildland Fire Ecology (3) |
| Exploring Ecosystem Science and Management  |                       | Range-Wildlife Habitat Management                           | Conservation Planning and Wildland Recreation                                        | Modeling and Management of Biological Resources                                                                                                                                                      | Agricultural Applications of Linear Programming        | Wildland Habitat Ecology and Assessment          | Science and Decision-Making for a Complex World | Wildlife Ecology and Management | Principles of Wildland Water Quality                                                                                                                                                                                                                                                                                      | Fundamentals of Watershed Science                                                                                                                                                                 | Forest Management          | Intro to Natural Resources      | Capstone in Rangeland Management |                                    |
| ECCB 205 (3)                                |                       | NRM 4304 (3)                                                | RNR 355 (3)                                                                          | ESPM 115B (2)                                                                                                                                                                                        | ANS 129                                                | FOR 462 (3)                                      | AECN 141 (3)                                    | NRES 295 (3)                    | REWM 4285 (3)                                                                                                                                                                                                                                                                                                             | ENVS 3010 (3)                                                                                                                                                                                     | AGEC 1010 (3)              | AGNR 70 (3)                     |                                  |                                    |
| Fundamentals of Ecology                     |                       | Fire Ecology and Management                                 | Introduction to Wildland Fire                                                        | Biology of Aquatic Insects 2 Units                                                                                                                                                                   | Environmental Stewardship in Animal Production Systems | Watershed Science & Manage.                      | Intro. to the Econ. of Agriculture              | Ecohydrology                    | Wildland Hydrology                                                                                                                                                                                                                                                                                                        | Fund. of Nat. Res. & Environ. Policy                                                                                                                                                              | Agriculture Macroeconomics | Wildlife Conservation & Manage. |                                  |                                    |
| ECCB 215 (1)                                |                       | NRM- 3300 (3)                                               | WFSC 444 (4)                                                                         | ESPM 134 (3)                                                                                                                                                                                         | ANS 148                                                | NRS 383 (3)                                      | AECN 265 (3)                                    | AGSC 425 (4)                    | REWM 4700 (3)                                                                                                                                                                                                                                                                                                             | ENVS 4000 (3)                                                                                                                                                                                     |                            | AGNR 53 (3)                     |                                  |                                    |
| Fundamentals of Ecology-- Laboratory        |                       | GIS for NR Management                                       | Wildlife Ecology, Conservation, and Management                                       | Fire, insects, and disease in wildland ecosystems                                                                                                                                                    | Enterprise Analysis in Animal Industries               | Natural Resource and Ecosystem Service Economics | Resource and Environmental Economics I          | Forage Science                  | Wildland Watershed Management                                                                                                                                                                                                                                                                                             | Human Dimensions of Natural Resource Management                                                                                                                                                   |                            | Forest Production and Health    |                                  |                                    |
| RWFM 305 (3)                                |                       | NRM- 3311 (3)                                               | RAM 441 (3)                                                                          |                                                                                                                                                                                                      | PLS 150                                                | FOR 375 (3)                                      | NRES 412 (3)                                    |                                 | AGEC 4700 (3)                                                                                                                                                                                                                                                                                                             | APEC 3010 (3)                                                                                                                                                                                     |                            | AGNR 51 (3)                     |                                  |                                    |
| Princ. & Pract. of Wildlife & Fish. Manage. |                       | Field Ecology                                               | NR Manage. in Native Amer. Communities                                               |                                                                                                                                                                                                      | Sustainability & Agroecosystem Management              | Intro. to Spatial Analysis for NR Management     | Intro. to GIS                                   |                                 | Economics of Range Resources                                                                                                                                                                                                                                                                                              | Intro to Agricultural Economics                                                                                                                                                                   |                            | Silviculture and Fire Ecology   |                                  |                                    |

| Texas A&M Univ.                                                                                                                                                                                                                           | Texas Christian Univ. | Texas Tech Univ.                                          | Univ. of Arizona                                                                                                                                                                                                                                                            | Univ. of CA at Berkeley | Univ. of CA at Davis                            | Univ. of Idaho | Univ. of NE Lincoln                                                                          | Univ. of Nevada Reno                         | University of Wyoming | Utah State Univ.                                                                                                                                                                                                                                                    | Eastern WY College | Shasta College                             | Sheridan College | Bakersfield College |
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| RWFM 303 Fish & Wife Laws & Admin. (3) RWFM 321 Communic. NR (3) -AGEC 325 Farm & Ranch Manage. (3) - RWFM 351 GIS for Res. Manage, (3) - RWFM 375 Cons. of NR (3) -ECCB 304 Wild. & Fish. Cons (3) - RWFM 406 Wildf. Habitat Manage. (3) |                       | NRM 3325 - Integrated Natural Resources Management Skills | RAM 340 Cons. & Agric. Southwest (3), RNR 400 Nox. Invasive Plants (3), RNR 316: NR Ecology (3s) and RNR 200: Cons. of Natural Environ. (3), RNR 458 Ecosystem Ecol. & a Sust. Future (3), WSM 452 Dryland Ecohydrology & Vegetation Dyn. (3), ECOL 406R Cons. Biology (3). |                         | WFC 110. Biology & Conservation of Wild Mammals |                | ALEC 388 Ethics in Agriculture and Natural Resources; NRES 281 Introduction to Water Science | GEOG 210R: Introduction to Geotechnology (3) |                       | APEC 3012 Intro. to Nat. Res. & Region. Econ. (3) ENVS 3300 Fund. of Recreation Res. Mgt. (3) PSC 4320 Forage Prod. & Pasture Ecol. (3) PSC 4280 World Field Cropping Syst. (3) WILD 4500 Principles of Wildlife Mgt. (3) WILD 5300 Human Wildlife Interactions (3) |                    | AGNR 50 Natural Resources Measurements (3) |                  |                     |