

AGRICULTURE, TECHNOLOGY, and BUSINESS DIVISION

Faculty

C. White, Chairperson
 M. Andreasen, D. Bruce, V. Dooley,
 H. Elton, W. Johnson, B. Kolb, J. Kraft,
 B. Nisley, L. Satterlee, A. Sherwood,
 P. Thiel

Staff

M. Lackey, R. Mettes, M. Sherwood

Associate of Science Degree with specialization in

Accounting or Business Administration
 Agriculture Business
 Agriculture Communications
 Agriculture Education
 Agroecology
 Animal Science
 Range Management

Associate of Applied Science Degree

Business
 Business Technology –
 Administrative Assistant
 Business Technology –
 Network Technician
 Business Technology –
 Help Desk Specialist
 Equine Business Management
 Equine Riding and Training
 Farm and Ranch Management
 Farrier Business Management
 Production Agriculture
 Travel and Tourism
 Welding Technology

Northwest College Comprehensive Skills Certificate Option

Business Technology – General Office/
 Clerical Skills
 Production Agriculture
 Welding Technology

Northwest College Skills Certificate Option

Equine Care and Basic Riding
 MIG Welding
 Outdoor Guide Skills
 TIG Welding
 Word Processing

Agriculture

Agriculture, in its broadest definition, is the nation's largest industry. Northwest College is located in a strong productive agricultural and agribusiness region. This provides both the obligation and the opportunity to offer technologically advanced and theoretically sound career preparation. The explosion of knowledge in production efficiency enhancement has provided this nation the luxury of greater commodity production from constantly shrinking numbers of producers. To maintain this trend, we need more knowledgeable producers served by an increasing number of agriculture support services.

The richly interdisciplinary agriculture curriculum offers broad career preparation in fields related to animal agriculture, agronomy and agricultural economics. Laboratory work is stressed in all programs to enhance academic training. Students develop critical thinking and problem solving skills through the practical application of science and business management principles to farming and ranching situations. Direct experience with cattle, sheep, swine and horses is provided at the Paul Stock Agricultural Pavilion and the Meat Processing Center. Feed and soil analysis combine experiences on college farm ground and in a modern laboratory. Case studies enhance the practical experiences of record keeping and analysis in modern computer laboratories.

Students considering a career in agriculture should prepare with a sound science and math foundation in high school. Serious assessment of career goals with an advisor will assist the student in proper selection of an appropriate program of study.

Agriculture Business

This specialization prepares students for careers in agribusiness or for transfer into agricultural business, agricultural economics and farm and ranch management programs. The field involves the application of business and economic principles to farming and ranching enterprises and related industries. Employment possibilities are available in businesses which process and market agricultural products and those which sell products and services to producers. Additional opportunities exist in the operation of farms and ranches or in lending institutions. Students must success-

fully complete core courses with a "C-" or better to meet specialization requirements. Students who are planning to transfer to a four-year program may need to have additional hours beyond the specialization requirements at Northwest College in order to transfer in as a junior. These students should consult with their advisor and the appropriate four-year college catalog.

ASSOCIATE OF SCIENCE with specialization in AGRICULTURE BUSINESS

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	31-37

Six credits of General Education may be fulfilled by taking Core Courses or Core Electives.

Core Courses

Number and Title	Credits
ACCT 1050—Practical Accounting	3
or	
ACCT 2010—Principles of Accounting I	4
AGEC 1010—Agricultural Economics I	3
AGEC 2020—Farm/Ranch Business Management (Capstone Course)	4
AGRI 1010—Computers in Agriculture	3
TOTAL	13-14

Core Electives

Students must take three courses from the following list of approved courses.

Number and Title	Credits
AECL 1000—Agroecology	4
AECL 2010—Ecological Web: Soil	4
AECL 2020—Ecological Web: Agronomic and Horticultural Plant Biology (Capstone Course)	4
AGEC 1020—Agricultural Economics II	3
AGEC 2010—Farm/Ranch Business Records	3
AGEC 2300—Agricultural Marketing	3
ANSC 1022—Animal Science I	4
ANSC 1024—Animal Science II	4
TOTAL	9-12

General Electives selected in
 consultation with advisor

Transfer and General Electives

Number and Title	Credits
BIOL 1000—Principles of Biology	4
MATH 2350—Business Calculus	5
STAT 2010—Statistical Concepts for Business	4
STAT 2050—Fundamentals of Statistics	3

MINIMUM CREDITS FOR DEGREE = 64

Agriculture Communications

Career opportunities include work in agriculture-related publications, radio, and television. Transfer options are available regionally and nationally. In order to achieve an AS with a specialization in agriculture communications, students must successfully complete core courses with a “C-” or better to meet specialization requirements. Students who are planning to transfer to a four-year program may need to have additional hours beyond the specialization requirements at Northwest College in order to transfer in as a junior. These students should consult with their advisor and the appropriate four-year college catalog.

ASSOCIATE OF SCIENCE with specialization in AGRICULTURE COMMUNICATIONS

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	31-37

Core Courses

Number and Title	Credits
AGRI 2385—Agriculture Communication/Leadership	2
ANSC 1022—Animal Science I	4
CO/M 2485—Sophomore Seminar: Communication (Capstone Course)	3
JOUR 1100—Newswriting and Reporting I ..	3
JOUR 1240—Agriculture Communications Practicum	2
JOUR 2000—Broadcast Production	3
or	
JOUR 2140—News Editing and Layout	3
TOTAL	17

Core Electives

Students must take seven credits from the following list of approved courses.

Number and Title	Credits
AECL 2010—Ecological Web: Soil	4
AGEC 2300—Agricultural Marketing	3
AGRI 2390—Agriculture Literacy/Leadership ..	2
JOUR 1010—Publications Production	1-2
JOUR 2000—Newswriting and Reporting II ..	3
PHTO 1610—Introduction to Photography ...	3

Transfer and General Electives

The following courses are recommended as electives to support the specialization for General Education Requirements and Transfer programs.

Number and Title	Credits
AECL 1000—Agroecology	4
AECL 2020—Ecological Web: Agronomic and Horticultural Plant Biology	4
AGEC 1010—Agricultural Economics I	3
BIOL 2400—Ecology	3
CO/M 1010—Public Speaking	3
JOUR 1000—Introduction to Mass Media ...	3
RGMG 1000—Introduction to Range Management	3
RGMG 2000—Principles of Range Management	3
ZOO 2450—Wildlife Management	3

MINIMUM CREDITS FOR DEGREE = 64

Agriculture Education

This specialization will prepare students to transfer to a university program of agriculture education/extension. In order to achieve an AS with a specialization in agriculture education, students must successfully complete core courses with a “C-” or better to meet specialization requirements. Upon transfer, graduates will select a more specific program of study for a bachelor’s degree which will prepare them for teaching at the secondary level or working in the extension service. Agriculture education majors are also sought after by many industry organizations because of the breadth of the training. Currently there is a national shortage of agriculture education teachers. Students who are planning to transfer to a four-year program may need to have additional hours beyond the specialization requirements at Northwest College in order to transfer in as a junior. These students should consult with their advisor and the appropriate four-year college catalog.

ASSOCIATE OF SCIENCE with specialization in AGRICULTURE EDUCATION

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	31-37

Three credits of General Education may be fulfilled by taking Core Courses.

Core Courses

Number and Title	Credits
AECL 1000—Agroecology	4
AGRI 2385—Agriculture Communication/Leadership	2

AGRI 2390—Agriculture Literacy/Leadership ..	2
ANSC 1022—Animal Science I	4
EDFD 2020—Foundations of Education	3
EDFD 2100—Educational Psychology	3
EDUC 2100—Public School Practicum (Capstone Course)	2
PSYC 1200—Human Development	3
WELD 1700—General Welding	3
TOTAL	26

Transfer and General Electives

The following courses are recommended as electives to support the specialization for General Education Requirements and Transfer programs.

Number and Title	Credits
AECL 2010—Ecological Web: Soil	4
AGEC 1010—Agricultural Economics I	3
AGEC 2010—Farm and Ranch Business Records	3
AGRI 1010—Computers in Agriculture	3
ANSC 1024—Animal Science II	4
ANSC 1210—Livestock Judging I	2
ANSC 2020—Feeds and Feeding	4
ANSC 2430—Comparative Anatomy and Physiology	4
BIOL 1000—Principles of Biology	4
CO/M 1010—Public Speaking	3
CROP 2200—Forage Crop Science	3
FDSC 2060—Fresh Meat Processing	3
HLED 1225—Standard First Aid and CPR ...	2
PSYC 1000—General Psychology	4
RGMG 2000—Principles of Range Management	3
STAT 2050—Fundamentals of Statistics	4

MINIMUM CREDITS FOR DEGREE = 64

Agroecology

This specialization is designed for students interested in the application and integration of biological and physical sciences to sustainable crop production. Students transfer into crop science or agronomy programs for careers in seed, fertilizer, and chemical industries or in crop production. Transfer into a soil science or ecology curriculum can lead to land management and natural resource management positions. Students must successfully complete core courses with a “C-” or better to meet specialization requirements. Students who are planning to transfer to a four-year program may need to have additional hours beyond the specialization requirements at Northwest College in order to transfer in as a junior. These students should consult with their advisor and the appropriate four-year college catalog.

**ASSOCIATE OF SCIENCE
with specialization in
AGROECOLOGY**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	31-37

Eleven credits of General Education may be fulfilled by taking Core Courses.

Core Courses

Number and Title	Credits
AECL 1000—Agroecology	4
AECL 2010—Ecological Web: Soil	4
AECL 2020—Ecological Web: Agronomic and Horticultural Plant Biology (Capstone Course)	4
AGEC 1010—Agricultural Economics I	3
TOTAL 15	

Core Electives

Students must take two courses from the following list of approved courses.

Number and Title	Credits
AGRI 1010—Computers in Agriculture	3
CROP 2200—Forage Crop Science	3
ENTO 1001—Insect Biology	4
TOTAL 6-7	

General Electives selected in consultation with advisor 14-19

Transfer and General Electives

Number and Title	Credits
BIOL 1010—General Biology I	4
BIOL 2400—Ecology	3
CHEM 1000—Introduction to Chemistry	5
CHEM 2300—Introduction to Organic Chemistry	4
STAT 2050—Fundamentals of Statistics	3

MINIMUM CREDITS FOR DEGREE = 64

Animal Science

The animal science curriculum provides a foundation in biological and physical sciences, augmented by applications to production in western environments. It prepares students to transfer into an advanced degree program in any of several options within animal science. Graduates find employment in feed and health product companies, livestock management and marketing, breed associations, government agencies, or the meat industry. Students must successfully complete core courses with

a “C-” or better to meet specialization requirements. Students who are planning to transfer to a four-year program may need to have additional hours beyond the specialization requirements at Northwest College in order to transfer in as a junior. These students should consult with their advisor and the appropriate four-year college catalog.

**ASSOCIATE OF SCIENCE
with specialization in
ANIMAL SCIENCE**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	31-37

Six credits of General Education may be fulfilled by taking Core Courses or Core Electives.

Core Courses

Number and Title	Credits
AGEC 1010—Agricultural Economics I	3
AGEC 2020—Farm/Ranch Business Management (Capstone Course)	4
ANSC 1022—Animal Science I	4
ANSC 1024—Animal Science II	4
TOTAL 15	

Core Electives

Students must take two courses from the following list of approved courses.

Number and Title	Credits
AGEC 1020—Agricultural Economics II	3
AGRI 1010—Computers in Agriculture	3
ANSC 1210—Livestock Judging I	2
ANSC 2020—Feeds and Feeding	4
ANSC 2430—Comparative Anatomy/Physiology of Domestic Animals	4
FDSC 2060—Fresh Meat Processing	3
RGMG 2000—Principles of Range Management	3
TOTAL 5-8	

General Electives selected in consultation with advisor 14-17

Transfer and General Electives

Number and Title	Credits
AECL 2010—Ecological Web: Soil	4
CHEM 2300—Introduction to Organic Chemistry	4
CROP 2200—Forage Crop Science	3
STAT 2050—Fundamentals of Statistics	3

MINIMUM CREDITS FOR DEGREE = 64

Range Management

The range management specialization is designed for transfer to range science, rangeland ecology, or renewable resource programs. It includes courses in applied plant, soil, and animal sciences. Graduates find positions in land management, range livestock management, and wildlife management. Students must successfully complete core courses with a “C-” or better to meet specialization requirements. Students who are planning to transfer to a four-year program may need to have additional hours beyond the specialization requirements at Northwest College in order to transfer in as a junior. These students should consult with their advisor and the appropriate four-year college catalog.

**ASSOCIATE OF SCIENCE
with specialization in
RANGE MANAGEMENT**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	31-37

Eleven credits of General Education may be fulfilled by taking Core Courses or Core Electives.

Core Courses

Number and Title	Credits
AECL 1000—Agroecology	4
AECL 2010—Ecological Web: Soil	4
AECL 2020—Ecological Web: Agronomic and Horticultural Plant Biology (Capstone Course)	4
RGMG 1000—Introduction to Range Management	1
RGMG 2000—Principles of Range Management	3
TOTAL 16	

Core Electives

Students must take two courses from the following list of approved courses.

Number and Title	Credits
AGEC 1010—Agricultural Economics I	3
AGRI 1010—Computers in Agriculture	3
ANSC 1022—Animal Science I	4
ANSC 1024—Animal Science II	4
ENTO 1001—Insect Biology	4
TOTAL 6-8	

General Electives selected in consultation with advisor 13-18

Transfer and General Electives

Number and Title	Credits
BIOL 2400—Ecology	3
BOT 2050—Taxonomy of Flowering Plants ..	4
BOT 2100—Forest Management	3
CHEM 1000—Introduction to Chemistry.....	5
STAT 2050—Fundamentals of Statistics	3

MINIMUM CREDITS FOR DEGREE = 64

**ASSOCIATE OF APPLIED SCIENCE
PRODUCTION AGRICULTURE**

Designed for individuals desiring to return to Production Agriculture after the two-year sequence. Many courses will meet transfer requirements.

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	20-23

Core Courses

Number and Title	Credits
AGEC 1010—Agricultural Economics I	3
AGEC 2010—Farm and Ranch Business Records.....	3
AGEC 2020—Farm and Ranch Business Management (Capstone Course)	4
AGRI 1010—Computers in Agriculture	3
Agroecology Electives	8
(select from any courses with the following designators: AECL, CROP, RGMG)	
Animal Science Electives.....	8
(select from any courses with the following designators: ANSC, FDSC)	
TOTAL 29	

Recommended Electives

Number and Title	Credits
Agriculture Electives selected in consultation with advisor from any courses with the following designators: AECL, AGECE, ANSC, CROP, FDSC, RGMG,	15

MINIMUM CREDITS FOR DEGREE = 64

**ASSOCIATE OF APPLIED SCIENCE
FARM AND RANCH MANAGEMENT**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	20-23

Core Courses

Number and Title	Credits
ACCT 1050—Practical Accounting	3
or	

ACCT 2010—Accounting I	4
AGEC 1010—Agricultural Economics I	3
AGEC 2010—Farm and Ranch Business Records	3
AGEC 2020—Farm and Ranch Business Management (Capstone Course).....	4
AGEC 2300—Agricultural Marketing	3
AGRI 1010—Computers in Agriculture	3
Agroecology/Agronomy Elective	3
Animal Science Elective	3
BADM 2010—Business Law.....	3
BADM 2100—Small Business Practices.....	3
MKT 1000—Sales	3
TOTAL 34-35	

General Electives selected in consultation with advisor

7-10

MINIMUM CREDITS FOR DEGREE = 64

**NORTHWEST COLLEGE
COMPREHENSIVE SKILLS
CERTIFICATE
PRODUCTION AGRICULTURE**

Number and Title	Credits
AGEC 1010—Agricultural Economics I	3
or	
AGEC 1020—Agricultural Economics II	3
AGEC 2010—Farm and Ranch Business Records	3
AGEC 2020—Farm and Ranch Business Management (Capstone Course).....	4
AGEC 2300—Agricultural Marketing	3
AGRI 1010—Computers in Agriculture	3
Animal Science elective	4
Agroecology	4
(select from any courses with the following designators: AECL, CROP, RGMG)	
BADM 1005—Business Mathematics or equivalent	3
CO/M 1010—Public Speaking	3
or	
ENGL Freshman English.....	3
Electives	3
TOTAL 32	

TOTAL CREDITS FOR CERTIFICATE = 32

Business – Transfer

The Business Department offers two-year transfer programs for students seeking a baccalaureate degree in the areas of Accounting and Business Administration. In conjunction with the specialization described for graduation from Northwest College, students should work closely with an advisor from the Business Department in designing their transfer program. Many courses in a two-year program require prerequisites; please refer to the course descriptions section at the back of this catalog for more information.

Accounting or Business Administration

This specialization provides students who wish to concentrate in the study of Accounting or Business Administration with course work that is a common base for advanced study and/or careers in the world of business. Students who study in this area typically seek degrees at senior institutions in the fields of Accounting, Finance, Management, Marketing and Personnel Administration among others. A degree in business is a popular choice for students planning to attend Law School upon graduation. Northwest College’s Business Department offers students an opportunity to build a solid foundation in each of these areas.

Students who are planning to enter careers in business through advanced study at a four-year institution will need to have course work beyond the specialization requirements at Northwest College.

Students must consult closely with their academic advisor in the Business Department to determine which general education elective courses (social science, humanities, visual and performing arts, and lab science) will satisfy specific requirements of their intended transfer college or university. Most four-year institutions have prescribed requirements for admission to junior-level upper division status in their respective business programs. Note: Not all business courses offered at NWC are designed for transfer. Please consult with your academic advisor before selecting courses. Students will be required to complete each core course with a “C-” or better to meet specialization requirements.

**ASSOCIATE OF SCIENCE
with specialization in
ACCOUNTING or BUSINESS
ADMINISTRATION**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	31-37

Six credits of Social Science and seven to nine credits of Mathematics may be fulfilled by taking Core Courses.

Core Courses

Number and Title	Credits
ACCT 2010—Principles of Accounting I.....	4
ACCT 2020—Principles of Accounting II.....	4
BADM 2395—Capstone in Business (Capstone Course).....	1
ECON 1010—Macroeconomics	3
ECON 1020—Microeconomics	3
MATH 1050—Finite Mathematics	3
or	
MATH 2350—Business Calculus	5
STAT 2010—Statistical Concepts for Business	4
TOTAL	22-24

Transfer and General Electives selected in consultation with advisor 14-20

Recommended Transfer and General Electives

Number and Title	Credits
ACCT 2410—Intermediate Accounting I	3
ACCT 2110—Microcomputer Accounting.....	2
BADM 1000—Introduction to Business.....	3
BADM 1020—Business Communication.....	3
BADM 2010—Business Law.....	3
BMIS 2000—Computer Information Systems	3
BUSN 2000—Introduction to International Business	3
CO/M 1010—Public Speaking	3
MGT 2100—Principles of Management.....	3
MKT 2100—Principles of Marketing.....	3

MINIMUM CREDITS FOR DEGREE = 64

Business – Two Year

This business program prepares students for entry-level positions in business. It emphasizes writing, speaking, and problem-solving skills and provides students with the general education and business course work favored by many employers. Most required course work is transferable should the student decide to pursue a bachelor's degree. The program is capped with an internship, wherein students work part-time in professional positions to gain experience and ease the transition from school to career.

ASSOCIATE OF APPLIED SCIENCE BUSINESS

General Education Requirements

Number and Title	Credits
BADM 1005—Business Mathematics.....	3
or	
MATH Any College-Level Mathematics	4
BADM 1020—Business Communication.....	3
CO/M 1010—Public Speaking	3

ECON 1010—Macroeconomics	3
or	
ECON 1020—Microeconomics	3
ENGL 1010—English I: Introduction to Composition	3
POLS 1000—American and Wyoming Government.....	3
or	
HIST 1221—The United States From 1865 ..	3
or	
HIST 1210—United States History I.....	3
and	
HIST 1250—History of Wyoming.....	3
Wellness Education	2
TOTAL	20-21

Core Courses

Number and Title	Credits
ACCT 2010—Principles of Accounting I.....	4
ACCT 2020—Principles of Accounting II.....	4
BADM 1000—Introduction to Business.....	3
BADM 2010—Business Law.....	3
BADM 2030—Business Ethics.....	3
BMIS 2000—Computer Information Systems	3
MGT 2100—Principles of Management.....	3
MKT 2100—Principles of Marketing.....	3
BADM 2395—Capstone in Business (Capstone Course).....	1
TOTAL	27

Recommended Electives

Number and Title	Credits
General Electives selected in consultation with advisor, 12 of which must be business courses.....	18-21
or	
STUDENTS may CHOOSE to complete one of the following tracks as their selected electives. This will provide the students with a competency level in a specific area of business as opposed to a general business program or degree.	

Track I — Accounting

Number and Title	Credits
ACCT 2110—Microcomputer Accounting....	2
ACCT 2410—Intermediate Accounting I	3
CMAP 1765—Spreadsheet Application: Excel..	2
MGT 1470—Internship: Management.....	3

Track II — Management

Number and Title	Credits
BADM 2100—Small Business Practices.....	3
MGT 1000—Introduction to Supervision.....	3
MGT 2470—Internship: Management.....	3

Track III — Marketing

Number and Title	Credits
BADM 1045—e-Commerce for Managers....	3

MGT 2470—Internship: Management.....	3
MKT 1000—Sales	3

MINIMUM CREDITS FOR DEGREE = 64

Travel and Tourism

This degree will train students to work in entry-level management jobs in a variety of travel and tourism industries. The program will concentrate on polishing various generalized entrepreneurial skills, including writing, organizing, and quantitative analysis. Specific skills relevant to the travel and tourism industry will be cultivated through classroom and actual practical experiences.

ASSOCIATE OF APPLIED SCIENCE TRAVEL AND TOURISM

General Education Requirements

Number and Title	Credits
BADM 1005—Business Mathematics.....	3
or	
MATH—Any College-Level Mathematics .	3-4
BADM 1020—Business Communication.....	3
CO/M 1030—Interpersonal Communication .	3
ENGL 1010—English I: Introduction to Composition	3
POLS 1000—American and Wyoming Government.....	3
or	
HIST 1221—The United States from 1865 ...	3
or	
HIST 1210—United States History I.....	3
and	
HIST 1250—History of Wyoming.....	3
GEOL 1035—Geology of Yellowstone National Park.....	1
or	
GEOL 1030—Geology of Northern Wyoming	3
TOTAL	16-22

Core Courses

Number and Title	Credits
ACCT 2010—Principles of Accounting I.....	4
BADM 1050—Introduction to Travel and Tourism.....	3
BADM 1400—Introduction to Hospitality	3
BADM 2010—Business Law.....	3
BADM 2395—Capstone in Business (Capstone Course).....	1
BADM 2970—Internship/Practicum Travel and Tourism:.....	1-6
BMIS 2000—Computer Information Systems	3
MGT 2100—Principles of Management.....	3
MKT 2100—Principles of Marketing	3
TOTAL	24-29

General Electives selected in consultation with advisor Up to 8

Recommended Electives

Number and Title	Credits
ACCT 2020—Principles of Accounting II.....	4
BADM 1060—Centralized Reservation System.....	2
BADM 2030—Business Ethics.....	3
BUSN 2000—Introduction to International Business.....	3
CMAP 1890—World Wide Web Authoring... 1	
ECON 1020—Microeconomics.....	3
G&R 1250—Geography of Travel and Tourism.....	3

MINIMUM CREDITS FOR DEGREE = 64

Business Technology

This degree prepares students for careers in the computer information systems field with three options. Each of these three options allows students to develop entry level skills needed for employment. The Network Technician option will emphasize the hardware, network, and programming component while the Help Desk Specialist option will focus on user support and training for the computerized office. The Administrative Assistant option is designed to reflect current needs in business offices and will include software applications and Microsoft Office Specialist certification preparation.

ASSOCIATE OF APPLIED SCIENCE ADMINISTRATIVE ASSISTANT OPTION

General Education Requirements

Number and Title	Credits
BADM 1005—Business Mathematics.....	3
BADM 1020—Business Communications	3
CO/M 1010—Public Speaking	3
or	
CO/M 1030—Interpersonal Communication.	3
ENGL 1010—English I: Introduction to Composition.....	3
POLS 1000—American and Wyoming Government.....	3
or	
HIST 1221—The United States from 1865 ...	3
Science/Social Science/Visual & Performing Arts.....	3
Wellness Education	2
TOTAL 20	

Core Courses

Number and Title	Credits
ACCT 1050—Practical Accounting.....	3
or	
ACCT 2010—Principles of Accounting I.....	4

ACCT 2110—Microcomputer Accounting....	2
BADM 1000—Introduction to Business.....	3
BMSI 2000—Computer Information Systems	3
BOTK 2750—Records and Information Management.....	1
BOTK 2950—Employment Orientation	1
CMAP 1715—Word Processing:	2
CMAP 1765—Spreadsheet Applications:.....	2
CMAP 1815—Database Applications:	2
CMAP 1850—Desktop Publishing	3
CMAP 2630—Presentation Graphics:	2
MGT 1000—Introduction to Supervision.....	3
BADM 2395—Capstone in Business (Capstone Course).....	1
TOTAL 28-29	

General Electives selected in consultation with advisor Up to 16

Recommended Electives

Number and Title	Credits
BADM 2010—Business Law.....	3
BADM 2100—Small Business Practices.....	3
BOTK 1500—Ten-Key Mastery	1
BOTK 2510—Legal Terminology	1
BOTK 2600—Medical Transcription.....	3
BOTK 2620—Medical Coding	2
BOTK 2970—Internship:.....	2
BUSN 2000—Introduction to International Business	3
CMAP 1680—Microcomputer Applications:	1-3
CMAP 1890—World Wide Web Authoring... 1	
CMAP 1920—Computer Hardware Maintenance	3
CMAP 2900—Advanced Integrated Computer Applications	3
GRAR 1800—Introduction to Macintosh.....	3

MINIMUM CREDITS FOR DEGREE = 64

ASSOCIATE OF APPLIED SCIENCE NETWORK TECHNICIAN OPTION

General Education Requirements

Number and Title	Credits
BADM 1005—Business Mathematics.....	3
or	
MATH—Any College-Level Mathematics .	3-4
CO/M 1010—Public Speaking	3
ENGL 1010—English I: Introduction to Composition	3
BADM 1020—Business Communication.....	3
or	
ENGL 2010—Technical Report Writing	3
POLS 1000—American and Wyoming Government.....	3
or	
HIST 1221—The United States from 1865 ...	3
Science/Social Science/Visual & Performing Arts.....	3
Wellness Education	2
TOTAL 20-21	

Core Courses

Number and Title	Credits
BMSI 2000—Computer Information Systems..	3
CMAP 1615—Operating Systems	3
CMAP 1635—Visual Basic for Applications	3
CMAP 1920—Computer Hardware Maintenance	3
CMAP 1930—Wiring and Network Technology	3
CMAP 1940—LAN Server Installation and Configuration	3
CMAP 1950—LAN Services and Support	3
CMAP 2575—Wireless Network Administration.....	3
CMAP 2720—Systems Management (Capstone Course).....	3
CMAP 2840—Network Documentation.....	2
CMAP 2970—Internship:	1-6
INET 2010—Database Driven Websites.....	3
TOTAL 33-38	

General Electives selected in consultation with advisor Up to 7

Recommended Electives

Number and Title	Credit
ACCT 1050—Practical Accounting.....	3
ACCT 2010—Principles of Accounting I.....	4
ACCT 2110—Microcomputer Accounting....	2
BADM 2030—Business Ethics.....	2
BADM 2100—Small Business Practices.....	3
BOTK 2950—Employment Orientation	1
CMAP 1715—Word Processing:	2
CMAP 1765—Spreadsheet Applications:.....	2
CMAP 1815—Database Applications:	2
CMAP 1850—Desktop Publishing I:	3
CMAP 1910—Integrated Applications III....	3
COSC 1010—Introduction to Computer Science	4
COSC 2030—Computer Science II	4
GRAR 1800—Introduction to Macintosh.....	3
JOUR 1020—Webcasting Practicum I.....	1-2
MGT 1000—Introduction to Supervision.....	3
PHTO 2650—Digital Imaging I.....	3
PHTO 2660—Web Page Design	3

MINIMUM CREDITS FOR DEGREE = 64

ASSOCIATE OF APPLIED SCIENCE HELP DESK SPECIALIST OPTION

General Education Requirements

Number and Title	Credits
BADM 1005—Business Mathematics.....	3
or	
MATH—Any College-Level Mathematics .	3-4
CO/M 1010—Public Speaking	3
ENGL 1010—English I: Introduction to Composition	3
BADM 1020—Business Communication.....	3
or	
ENGL 2010—Technical Report Writing	3
POLS 1000—American and Wyoming Government.....	3
or	
HIST 1221—The United States from 1865 ...	3

Science/Social Science/Visual & Performing Arts	3
Wellness Education	2
TOTAL 20-21	

Core Courses

Number and Title	Credits
BMIS 2000—Computer Information Systems	3
CMAP 1615—Operating Systems	3
CMAP 1635—Visual Basic for Microsoft Office	3
CMAP 1715—Word Processing:	2
CMAP 1765—Spreadsheet Applications:	2
CMAP 1815—Database Applications:	2
CMAP 1920—Computer Hardware Maintenance	3
CMAP 1950—LAN Services and Support	3
CMAP 2540—Introduction to Help Desk Management (Capstone Course)	2
CMAP 2825—Help Desk Fundamentals	4
CMAP 2970—Internship:	1-6
GRAR 1800—Introduction to Macintosh	3
BADM 2395—Capstone in Business (Capstone Course)	1
TOTAL 38	

General Electives selected in consultation with advisor Up to 9

Recommended Electives

Number and Title	Credits
ACCT 1050—Practical Accounting	3
ACCT 2010—Principles of Accounting I	4
ACCT 2110—Microcomputer Accounting	2
BADM 2030—Business Ethics	2
BADM 2100—Small Business Practices	3
BIOL 2310—Introduction to Geographic Information Systems	3
BOTK 2950—Employment Orientation	1
CMAP 1850—Desktop Publishing I:	3
JOUR 1020—Webcasting Practicum I	1-2
MGT 1000—Introduction to Supervision	3
PHTO 2650—Digital Imaging I	3
PHTO 2660—Web Page Design	3

MINIMUM CREDITS FOR DEGREE = 64

**NORTHWEST COLLEGE
COMPREHENSIVE SKILLS
CERTIFICATE
BUSINESS TECHNOLOGY-GENERAL
OFFICE/CLERICAL SKILLS**

This certificate program is designed to provide students with the basic secretarial skills needed in a general office setting. It also provides a foundation of courses for those students who might wish to continue their office career preparation in a two-year Business Technology Administrative Assistant degree option at Northwest.

Number and Title	Credits
ACCT 1050—Practical Accounting	3
or	
ACCT 2010—Principles of Accounting I	4
ACCT 2110—Microcomputer Accounting	2
BADM 1000—Introduction to Business	3
BADM 1005—Business Mathematics	3
BADM 1020—Business Communication	3
BMIS 2000—Computer Information Systems	3
BOTK 2750—Records and Information Management	1
BOTK 2950—Employment Orientation	1
CMAP 1715—Word Processing:	2
ENGL 1010—English I: Introduction to Composition	3
Electives selected in consultation with advisor, 2 of which must be selected from the following designators: ACCT, BADM, BOTK, CMAP	Up to 9
TOTAL 32-34	

TOTAL CREDITS FOR CERTIFICATE = 32-34

**NORTHWEST COLLEGE SKILLS
CERTIFICATE
WORD PROCESSING**

This certificate program is designed to develop and recognize advanced skill in word processing using a microcomputer and a currently popular word processing software package.

Number and Title	Credits
BMIS 2000—Computer Information Systems	3
CMAP 1715—Word Processing:	2
CMAP 1850—Desktop Publishing I:	3
CMAP 2630—Presentation Graphics:	2
TOTAL 10	

TOTAL CREDITS FOR CERTIFICATE = 10

Equine Studies

Growth of the equine industry in the United States has created a demand for qualified personnel in all of its related fields. The associate degree program in equine studies is intended to provide basic, practical, and theoretical grounds from which students may directly enter their fields of interest.

This two-year program has two options that emphasize a practical approach. The riding and training option assists students in learning riding, training, and horse handling skills in addition to related management concepts. It is not mandatory for the student to supply a horse for training, but all students are strongly urged to do so. Students completing the program may find employment in riding academies, training

stables, summer camps, and feed or saddle companies.

The equine business management option is designed for those who would like to be involved in the sales and merchandising aspects of the equine industry. Students need not have a horse to pursue this exciting career field.

The associate of applied science degree has been designed to meet the sophisticated demands of today's market.

**ASSOCIATE OF APPLIED SCIENCE
EQUINE RIDING AND TRAINING**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	20-23

Core Courses

Number and Title	Credits
ANSC 2430—Comparative Anatomy/Physiology of Domestic Animals	4
EQST 1510—Equine Nutrition	2
or	
ANSC 2020—Feeds and Feeding	4
EQST 1520—Horse Production I	3
EQST 1525—Horse Production II	3
EQST 1540—Applied Horse & Stall Care I	1
EQST 1545—Applied Horse & Stall Care II	1
EQST 1550—Equine Evaluation I	2
EQST 1680—Horse Handling and Behavior ..	2
EQST 1805—Farrier Science I	2
EQST 2520—Equine Breeding	3
EQST 2540—Applied Horse & Stall Care III	1
EQST 2545—Applied Horse & Stall Care IV	1
EQST 2680—Western Horsemanship	3
EQST 2690—Hunt Seat Equitation	3
EQST 2800—Fundamentals of Teaching Riding	3
EQST 2810—Training & Development of the Western Horse I	3
or	
EQST 2830—Training & Development of the English Horse I	3
EQST 2820—Training & Development of the Western Horse II (Capstone Course) ...	3
or	
EQST 2840—Training & Development of the English Horse II (Capstone Course) ...	3
TOTAL 40-42	

General Electives selected in consultation with advisor 6

MINIMUM CREDITS FOR DEGREE = 64

**ASSOCIATE OF APPLIED SCIENCE
EQUINE BUSINESS
MANAGEMENT**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	20-23

Core Courses

Number and Title	Credits
ACCT 2010—Principles of Accounting	4
AGEC 2010—Farm and Ranch Business Records.....	3
AGRI 1010—Computers in Agriculture	3
or	
BMIS 2000—Computer Information Systems	3
BADM 2010—Business Law.....	3
BADM 2100—Small Business Practices.....	3
ECON 1010—Macroeconomics	3
or	
ECON 1020—Microeconomics	3
or	
AGEC 1010—Agriculture Economics I	3
or	
AGEC 1020—Agriculture Economics II	3
EQST 1510—Equine Nutrition.....	3
or	
ANSC 2020—Feeds & Feeding.....	3
EQST 1520—Horse Production I.....	3
EQST 1525—Horse Production II.....	3
EQST 1550—Equine Evaluation I.....	2
or	
EQST 2520—Equine Breeding.....	3
or	
EQST 2680—Western Horsemanship.....	3
MKT 1000—Sales	3
or	
MKT 2100—Principles of Marketing.....	3
MGT 2100—Principles of Management.....	3
EQST 2515—Horse Show/Clinic/Event Management.....	2
TOTAL 42	
General Electives selected in consultation with advisor	3

MINIMUM CREDITS FOR DEGREE = 64

**ASSOCIATE OF APPLIED SCIENCE
FARRIER BUSINESS
MANAGEMENT**

General Education Requirements

Number and Title	Credits
Students should refer to the Graduation Requirements on pages 26-32	20-23

Core Courses

Number and Title	Credits
ACCT 1050—Practical Accounting.....	3
AGEC 2020—Farm and Ranch Business Management (Capstone Course).....	4
AGRI 1010—Computers in Agriculture	3

BADM 2100—Small Business Practices.....	3
EQST 1520—Horse Production I.....	3
EQST 1550—Equine Evaluation I.....	2
EQST 1680—Horse Handling and Behavior..	2
EQST 1805—Farrier Science I.....	2
EQST 1810—Farrier Science II.....	3
EQST 1815—Production Shoeing I.....	3
EQST 1820—Production Shoeing II.....	3
EQST 1825—Production Shoeing III.....	3
EQST 1830—Production Shoeing IV.....	3
WELD 1600—General Arc Welding	2-3
TOTAL 39-40	

General Electives selected in consultation with advisor	7-9
---	-----

MINIMUM CREDITS FOR DEGREE = 64

**NORTHWEST COLLEGE SKILLS
CERTIFICATE
EQUINE CARE AND BASIC TRAINING**

This program of courses is designed to promote quality care of the horse and give the student basic riding and occupational skills. In their course work students will cover equine safety, health management, nutrition, equine behavior, tack fitting and basic horse safety. Students will be prepared for jobs such as boarding stables operator, riding stable help, wrangler, trail ride guide, groom, equine salesperson, breeding farm operator, and farm sitter.

Core Courses

Number and Title	Credits
EQST 1510—Equine Nutrition.....	2
EQST 1520—Horse Production I.....	3
EQST 1525—Horse Production II.....	3
EQST 2500—Equine Health Management....	2
or	
ANSC 2020—Feeds and Feeding	4
EQST 1505—Basic Horsemanship.....	1
EQST 1550—Equine Evaluation	2
EQST 1645—Tack, Fit and Function.....	3
EQST 1680—Horse Handling and Behavior ..	2
TOTAL 18-20	

Recommended Electives

EQST 1540—Applied Horse and Stall Care I I	2
EQST 1805—Farrier Science I.....	2
EQST 2550—Training the Young Horse I.....	2
EQST 2520—Equine Breeding.....	3
EQST 2690—Hunt Seat Equitation	3
EQST 2680—Western Horsemanship.....	3

TOTAL CREDITS FOR CERTIFICATE = 18-20

**NORTHWEST COLLEGE SKILLS
CERTIFICATE
OUTDOOR GUIDE SKILLS**

Through an intense course students will gain practical experience in camp con-

struction and management, horse and mule packing, big game guiding, livestock care and handling, basic horsemanship, back-country survival and first aid, weapons safety, food preparation, and effective customer relations and service. The objective is to expose students to the best possible instruction and direction in becoming an advanced outdoors person or a part of the outdoor recreation industry and to provide the outdoor recreation industry with the most prepared, skilled and professional guides and outfitters in the industry.

Core Courses

Number and Title	Credits
EQST 2665—Outdoor Guide Skills	7

TOTAL CREDITS FOR CERTIFICATE = 7

Technical Education

Students interested in entering the field of technical education will develop an individual course of study in cooperation with a technical education advisor and an education advisor. (See the suggested education programs of study in the Social Science and Education Division section of this catalog.)

Welding Technology

The welding technology program is designed to give the student a solid background in the latest techniques, procedures, and processes in welding. Students are encouraged to complete the two-year program, although a Northwest College certificate (60 credits, see page 26) is an available option, in addition to Northwest College skills certificate options.

**ASSOCIATE OF APPLIED SCIENCE
WELDING TECHNOLOGY**

Core Courses

Number and Title	Credits
ENGL—Freshman Level English	3
BADM 1020—Business Communication.....	3
MATH 1510—Technical Mathematics I (or equivalent).....	3
POLS 1000—American and Wyoming Government.....	3
or	
HIST 1210—United States History I.....	3
and	
HIST 1250—History of Wyoming	3

WELD 1555—Welding Technology Safety and Problem Solving	2
WELD 1650—Print Reading	3
WELD 1705—Welding Processes	4
WELD 1765—Advanced Welding Processes	4
WELD 1800—Materials Evaluation.....	1-6
WELD 1860—Welding Fabrication.....	4
WELD 1870—Advanced Metal Fabrication Techniques.....	4
WELD 2670—Welding Inspection Technology	3
WELD 2680—Welding Metallurgy	3
WELD 2700—Welding Certification (Plate) ..	4
WELD 2710—Welding Certification (Pipe) ..	4
WELD 2750—Metals Production.....	4
WELD 2985—Welding Seminar (Capstone Course).....	4
Wellness Education	2
* General Education Requirements.....	6
Electives	3
TOTAL 70-78	

TOTAL CREDITS FOR DEGREE = 70-78

* Students should refer to the Graduation Requirements on pages 26-32.

**NORTHWEST COLLEGE
COMPREHENSIVE SKILLS
CERTIFICATE
WELDING TECHNOLOGY**

Number and Title	Credits
MATH 1510—Technical Mathematics I (or equivalent).....	3
WELD 1555—Welding Technology Safety and Problem Solving	2
WELD 1650—Print Reading	3
WELD 1705—Welding Processes	4
WELD 1765—Advanced Welding Processes	4
WELD 1800—Materials Evaluation.....	1-6
WELD 1860—Welding Fabrication.....	4
WELD 1870—Advanced Metal Fabrication Techniques.....	4
WELD 2750—Metals Production.....	4
Elective.....	3
TOTAL 32-37	

TOTAL CREDITS FOR CERTIFICATE = 32-37

**NORTHWEST COLLEGE SKILLS
CERTIFICATE
MIG WELDING**

This certificate is designed for students to develop the knowledge and skills necessary for MIG Welding.

Core Courses

Number and Title	Credits
MATH 1510—Technical Mathematics I.....	3
WELD 1555—Welding Technology Safety and Problem Solving	2
WELD 1650—Print Reading	3
WELD 1700—General Welding	3
WELD 1770—GMAW - FCAW	4
WELD 1860—Welding Fabrication.....	4

WELD 1870—Advanced Metal Fabrication Techniques.....	4
WELD 2750—Metals Production.....	4
TOTAL 27	

Elective
Any other (3 credit or more) Welding class ... 3

TOTAL CREDITS FOR CERTIFICATE = 30

**NORTHWEST COLLEGE SKILLS
CERTIFICATE
TIG WELDING**

This certificate is designed for students to develop the knowledge and skills necessary for TIG Welding.

Core Courses

Number and Title	Credits
MATH 1510—Technical Mathematics I.....	3
WELD 1555—Welding Technology Safety Problem Solving	2
WELD 1650—Print Reading	3
WELD 1700—General Welding	3
WELD 1785—GTAW Welding.....	4
WELD 1860—Welding Fabrication.....	4
WELD 1870—Advanced Metal Fabrication Techniques.....	4
WELD 2750—Metals Production.....	4
TOTAL 27	

Elective
Any other (3 credit or more) Welding class ... 3

TOTAL CREDITS FOR CERTIFICATE = 30