Agriculture, Technology, and Business Division

# Faculty

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# Staff

M. Lackey, R. Mettes, M. Sherwood

# Associate of Science Degree with specialization in

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

# Associate of Applied Science Degree

### Business

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

# Northwest College Comprehensive Skills Certificate

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

# Northwest College Skills Certificate

Equine Care and Basic Riding Help Desk GMAW Welding GTAW Welding Outdoor Guide Skills 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, in a modern laboratory, and greenhouse. 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 39

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 successfully complete core courses with a "C-" or better to meet specialization requirements. Students 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	on
Requirements on pages 30-38	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 Accounti	ng I 4
AGEC 1010—Agricultural Economic	cs I 3
AECL 2395—Plant Science Research	Methods
(Capstone Course)	2
AGRI 1010—Computers in Agricultu	ıre2
TOTA	AL 10-11

#### **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 2395—Plant Science Research Methods
(Capstone Course) 2
AGEC 1020—Agricultural Economics II 3
AGEC 2010—Farm/Ranch Business
Records
AGEC 2300—Agricultural Marketing 3
ANSC 1022—Animal Science I 4
ANSC 1024—Animal Science II 4
TOTAL 8-12

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 Statis	tics 4

MINIMUM CREDITS FOR DEGREE = 64

# Agriculture Communication

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 Communication, students must successfully complete core courses with a "C-" or better to meet specialization requirements. Students 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 COMMUNICATION

#### **General Education Requirements**

Number and Title	Credits
Students should refer to the Graduation	on
Requirements on pages 30-38	31-37

#### **Core Courses**

Number and Title	Credits
AGRI 2385—Agriculture Communic	ation/
Leadership	2
ANSC 1022—Animal Science I	4
CO/M 2485—Sophomore Seminar:	
Communication (Capstone Course	e)3
JOUR 1100-Newswriting and Report	ting I 3
JOUR 1240—Agriculture Communic	ations
Practicum	2
JOUR 2000—Broadcast Production	3
or	
JOUR 2140—News Editing and Layo	out3
TC	OTAL 17

#### **Core Electives**

Students must take 6-7 credits from the following list of approved courses.

#### Number and Title

AECL 2010-Ecological Web: Soil 4
AGEC 2300—Agricultural Marketing 3
AGRI 2390—Agriculture Literacy/Leadership 2
JOUR 1010-Publications Production1-2
JOUR 2000-Newswriting and Reporting II.3
PHTO 1610-Introduction to Photography 3
CROP 2200—Forage Crop Science 3

Credits

### **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 2395—Plant Science Research	Methods
(Capstone Course)	2
AGEC 1010—Agricultural Economic	cs I 3
BIOL 2400-Ecology	3
CO/M 1010—Public Speaking	3
JOUR 1000—Introduction to Mass M	Iedia3
RGMG 1000—Introduction to Rang	e
Management	3
RGMG 2000—Principles of Range	
Management	3
RGMG 2490—Rangeland Plant	
Identification	2
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 planning to transfer to a fouryear 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 30-38......31-37

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

# Core Courses

Number and Title	Credits
AECL 1000—Agroecology	
AGRI 2385—Agriculture Communica	ation/
Leadership	2
AGRI 2390—Agriculture Literacy/Leade	ership 2
ANSC 1022—Animal Science I	4
EDFD 2020—Foundations of Educat	ion 3
EDFD 2100—Educational Psycholog	y3
EDUC 2100—Practicum in Teaching	
(Capstone Course)	2
PSYC 1200—Human Development	
WELD 1700—General Welding	
TC	TAL 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
AGRI 1010—Computers in Agriculture 2
ANSC 1024—Animal Science II 4
ANSC 1210—Livestock Judging I 2
ANSC 2020—Feeds and Feeding 4
ANSC 2430—Comparative Anatomy and
Physiology4
BIOL 1000-Principles of Biology 4
CO/M 1010—Public Speaking
CROP 2200—Forage Crop Science
FDSC 2060—Fresh Meat Processing
HLED 1225—Standard First Aid and CPR 2
PSYC 1000—General Psychology 4
RGMG 2000—Principles of Range
Management
RGMG 2490—Rangeland Plant
Identification2
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 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 Graduati	on
Requirements on pages 30-38	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 2395—Plant Science Research	Methods
(Capstone Course)	2
AGEC 1010—Agricultural Economic	cs I 3
TO	OTAL 13

#### **Core Electives**

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

Number and Title	Credits
AGRI 1010—Computers in Agricultu	ıre2
CROP 2200—Forage Crop Science	
ENTO 1001—Insect Biology	4
ТО	TAL 5-7

General Electives selected in consultation with advisor ......7-15

# **Transfer and General Electives**

Number and Title	Credits
BIOL 1010—General Biology I	4
BIOL 2400—Ecology	3
CHEM 1000-Introduction to Chem	nistry 5

CHEM 2300—Introduction to Organic
Chemistry4
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 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**

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

### **Core Courses**

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

# **Core Electives**

Students must take at least five credits from the following list.

# Number and Title Credits

AGEC 1020—Agricultural Economics II..... 3 AGRI 1010—Computers in Agriculture...... 2

ANSC 1210—Livestock Judging I2
ANSC 2020-Feeds and Feeding 4
ANSC 2430—Comparative Anatomy/
Physiology of Domestic Animals4
FDSC 2060—Fresh Meat Processing
RGMG 2000—Principles of Range
Management3
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 Organ	nic
Chemistry	4
CROP 2200—Forage Crop Science	3
STAT 2050—Fundamentals of Statist	tics 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 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 30-38......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 2395—Plant Science Research	Methods
(Capstone Course)	2
RGMG 1000—Introduction to Rang	
Management	1
RGMG 2000—Principles of Range	
Management	
RGMG 2490—Rangeland Plant	
Identification	2
TC	OTAL 16

# **Core Electives**

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

Number and Title	Credits
AGEC 1010—Agricultural Economic	es I 3
AGRI 1010—Computers in Agricultu	ıre2
ANSC 1022—Animal Science I	4
ANSC 1024—Animal Science II	4
ENTO 1001—Insect Biology	4
TO	TAL 5-8

General Electives selected in
consultation with advisor13-18

### **Transfer and General Electives**

Number and Title	Credits
BIOL 2400—Ecology	
BOT 2050—Taxonomy of Flowering	Plants . 4
BOT 2100—Forest Management	3
CHEM 1000-Introduction to Chem	nistry 5
STAT 2050—Fundamentals of Statist	tics 3

MINIMUM CREDITS FOR DEGREE = 64

# **Production Agriculture**

The Production Agriculture Program is designed to provide marketable, entrylevel training in management of production agriculture enterprises. The program stresses the applied aspects of crop and livestock production, as well as business management. Students acquire necessary background in marketing, finance, management, range science, animal science, and crop and soil sciences. The program includes the flexibility for students to develop greater expertise in their particular area of interest. Some courses in this AAS program will transfer to four-year institutions.

### ASSOCIATE OF APPLIED SCIENCE PRODUCTION AGRICULTURE

### **General Education Requirements**

Number and Title	Credits
Students should refer to the Graduatic	on
Requirements on pages 30-38	20-23

#### **Core Courses**

Number and Title Credit	ts
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	2
Agroecology Electives	8
(select from any courses with the following	r
designators: AECL, CROP, RGMG)	
Animal Science Electives	8
(select from any courses with the following	r
designators: ANSC, FDSC)	
TOTAL 2	8

# **Recommended Electives**

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

MINIMUM CREDITS FOR DEGREE = 64

# NORTHWEST COLLEGE COMPREHENSIVE SKILLS CERTIFICATE PRODUCTION AGRICULTURE

N

Number and Title Credits
AGEC 1010—Agricultural Economics I 3
or
AGEC 1020—Agricultural Economics II 3
AGEC 2010—Farm and Ranch Business
Records
AGEC 2020—Farm and Ranch Business
Management (Capstone Course)4
AGEC 2300—Agricultural Marketing
AGRI 1010—Computers in Agriculture 2
Animal Science elective
Agroecology4
(select from any courses with the following
designators: AECL, CROP, RGMG)
BADM 1005-Business Mathematics or
equivalent3
CO/M 1010—Public Speaking
or
ENGL Freshman English3
Electives
TOTAL 32

# **Veterinary Assistant**

This program provides the knowledge and animal handling skills required to be an integral team player within veterinary practices, research facilities, or other animalrelated facilities. Students will learn to recognize behavioral signs and to care for a patient's basic needs under the direction of the veterinarian or designate. In addition, students will learn veterinary practice management skills including cleaning facilities and equipment, booking appointments, communicating with clients, and other receptionist duties. Students become skilled in the care and handling of small and large animals, as well as office management.

# ASSOCIATE OF APPLIED SCIENCE VETERINARY ASSISTANT

#### **General Education Requirements**

Number and Title	Credits
Students should refer to the Graduation	ı
Requirements on pages 30-38	20-23

# **Core Courses**

Number and Title Credits
ANSC 1022—Animal Science I 4
ANSC 1024—Animal Science II 4
ANSC 1330—Veterinary Practice
Orientation
ANSC 1980—Cooperative Education
(clinical experience)
ANSC 2020—Livestock Feeds and Feeding. 4
or
EQST 1510—Equine Nutrition2
ANSC 2320—Livestock Health
Management2
ANSC 2385—Veterinary Assistant Capstone
(Capstone Course)1
ANSC 2430—Comparative Anatomy and
Physiology of Domestic Animals4
ANSC 2970—Animal Care Internship
(clinical experience)
TOTAL 26-28

# **Core Electives**

Although not required, students are encouraged to gain additional work experience through the summer months at a veterinary practice in their home area.

Number and Title	Credits
EQST 1680—Horse Handling and Beha	avior3
EQST 1805—Farrier Science I	2
EQST 2500—Equine Health Managem	ent 2

# Farm and Ranch Management

The Farm and Ranch Program provides marketable, entry-level skills in management for positions in agriculture-related business and industry. Students obtain a foundational knowledge of plant and animal sciences to augment business knowledge and skills. Graduates of this program enter the rapidly expanding job market in businesses which process and market agriculture commodities or businesses which sell goods and services to producers. Students planning to return to a farm or ranch enterprise will also find this program useful. The selection of electives allows students to pursue their areas of interest. Students must complete core courses with a "C-" or better to meet specialization requirements.

# ASSOCIATE OF APPLIED SCIENCE FARM AND RANCH MANAGEMENT

### **General Education Requirements**

Number and Title	Credits
Students should refer to the Graduation	on
Requirements on pages 30-38	20-23

# **Core Courses**

N

Number and Title	Credits
ACCT 1050—Practical Accounting	3
or	
ACCT 2010—Accounting I	4
AGEC 1010—Agricultural Economic	cs I 3
AGEC 2010—Farm and Ranch Busin	ness
Records	3
AGEC 2020—Farm and Ranch Busin	ness
Management (Capstone Course)	4
AGEC 2300—Agricultural Marketing	g 3
AGRI 1010—Computers in Agricultu	ıre2
Agroecology/Agronomy Elective	3
Animal Science Elective	3
BADM 2010—Business Law	3
or	
BADM 2100—Small Business Practic	ces3
or	
MKT 1000—Sales	3
ТОТА	AL 27-28

General Electives selected in consultation with advisor ......7-10

MINIMUM CREDITS FOR DEGREE = 64

# Accounting or Business – Transfer

The Business Department offers a twoyear transfer program for students seeking a baccalaureate degree in the areas of Accounting, Business Administration, Finance, Management, Marketing, Personnel Administration or Business Information Systems. A degree in Business is a popular choice for students planning to attend law school as well. This specialization provides students an opportunity to acquire core requirements for the study of Accounting or any field in Business with coursework that is a common base for advanced study. The curriculum below offers students an opportunity to build a solid foundation for further study in any of these programs.

Students should work closely with their Business Department advisor to design a transfer program that meets NWC graduation requirements described below and prepares them for successful transfer. 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 the 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.

# Accounting or Business Administration

This specialization provides students who wish to concentrate in the study of Accounting or Business Administration with coursework that is a common base for advanced study and/or careers in 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 for further study in these programs.

Students planning to enter careers in business through advanced study at a four-year institution will need to have coursework 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 Graduati	on
Requirements on pages 30-38	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 C	redits
ACCT 2010—Principles of Accounting	I4
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

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
BADM 1000—Introduction to Business 3
BADM 1020-Business Communication 3
BADM 2010-Business Law
BMIS 2000—Computer Information
Systems
BUSN 2000—Introduction to International
Business
CO/M 1010—Public Speaking
IMGT 2400-Introduction to Information
Management3
MGT 2100—Principles of Management 3
MKT 2100—Principles of Marketing3

MINIMUM CREDITS FOR DEGREE = 64

# **Business – Two Year**

This Business Program prepares students for entry-level positions in business. It emphasizes writing, speaking, and problemsolving skills and provides students with the general education and business coursework favored by many employers. Most required coursework is transferable should the student decide to pursue a bachelor's degree. The program is capped with an internship, where 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
or
MATH Any College-Level Mathematics 3-5
BADM 1020—Business Communication3
CO/M 1010—Public Speaking 3
ECON 1010-Macroeconomics3
or
ECON 1020-Microeconomics3
ENGL 1010—English I: Introduction to
Composition3
POLS 1000—American and Wyoming
Government3

# **Core Courses**

Number and Title	Credits
ACCT 1050—Practical Accounting	3
or	
ACCT 2010-Principles of Accounting	ng I 4
BADM 1000—Introduction to Busin	ess 3
BADM 2010—Business Law	
BADM 2030—Business Ethics	3
BMIS 2000—Computer Information	
Systems	3
MGT 2100—Principles of Manageme	ent 3
MKT 2100—Principles of Marketing	3
BADM 2100—Small Business Practic	ces3
BADM 2395—Capstone in Business	
(Capstone Course)	1
TOTA	L 25-26

# **Recommended Electives**

Number and Title	Credits
General Electives selected in consultat	tion
with advisor, 12 credits of which must	be
business courses	18-21

MINIMUM CREDITS FOR DEGREE = 64

# **Travel and Tourism**

This degree trains students to work in entry-level management jobs in a variety of travel and tourism industries. The program concentrates on polishing various generalized entrepreneurial skills, including writing, organizing, and quantitative analysis. Specific skills relevant to the travel and tourism industry are 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 Mathemat	tics 3-5
BADM 1020—Business Communication	on3
CO/M 1030—Interpersonal Communic	ation 3
ENGL 1010—English I: Introduction	to
Composition	3
POLS 1000—American and Wyoming	
Government	3

or

HIST 1221—The United States from 18653
or
HIST 1210—United States History I
and
HIST 1250—History of Wyoming3
GEOL 1035-Geology of Yellowstone
National Park1
or
GEOL 1030—Geology of Northern
Wyoming
TOTAL 16-23

# **Core Courses**

Number and Title	Credits
ACCT 1050—Practical Accounting	3
or	
ACCT 2010—Principles of Accountin	ng I 4
BADM 1050-Introduction to Travel	and
Tourism	3
BADM 1400—Introduction to Hospi	tality 3
BADM 2010—Business Law	3
BADM 2395—Capstone in Business	
(Capstone Course)	1
BADM 2970—Internship/Practicum	
and Tourism:	1-6
BMIS 2000—Computer Information	Systems3
MGT 2100—Principles of Manageme	ent 3
MKT 2100-Principles of Marketing	3
TOTA	AL 23-29

General Electives selected in consultation with advisor ......Up to 8

# **Recommended Electives**

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Number and Title Credits
ACCT 2110—Microcomputer Accounting 2
BADM 2030—Business Ethics3
BUSN 2000—Introduction to International
Business
CMAP 1890—World Wide Web Authoring1
ECON 1020-Microeconomics
G&R 1250—Geography of Travel and
Tourism

MINIMUM CREDITS FOR DEGREE = 64

# **Business Technology**

This degree prepares students for careers in the computer information systems field with three options. Each option allows students to develop entry level skills needed for employment. The Network Technician option emphasizes the hardware, network, and programming component, while the Help Desk Specialist option focuses on user support and training for the computerized office. The Administrative Assistant option is designed to reflect current needs in business offices and includes 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	s 3
BADM 1020—Business Communica	tions 3
CO/M 1010—Public Speaking	3
or	
CO/M 1030—Interpersonal Commun	nication 3
ENGL 1010—English I: Introduction	n to
Composition	3
POLS 1000—American and Wyomir	ıg
Government	
or	
HIST 1221—The United States from	18653
Science/Social Science/Visual & Perfe	orming
Arts	
Wellness Education	2
TO	OTAL 20

# **Core Courses**

Number and Title Credits
ACCT 1050—Practical Accounting
or
ACCT 2010—Principles of Accounting I 4
ACCT 2110—Microcomputer Accounting2
BADM 1000—Introduction to Business 3
BMIS 2000—Computer Information
Systems
BOTK 2750—Records and Information
Management1
BOTK 2950—Employment Orientation 1
CMAP 1715—Word Processing:2
CMAP 1765—Spreadsheet Applications:2
CMAP 1815—Database Applications:2
CMAP 1850—Desktop Publishing3
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**

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Number and Title	Credits
BADM 2010—Business Law	3
BADM 2100—Small Business Practic	es3
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
CMAP 1680—Microcomputer Applications:
CMAP 1920—Computer Hardware
Maintenance
CMAP 2900-Advanced Integrated Computer
Applications3
GRAR 1800—Introduction to Macintosh3

MINIMUM CREDITS FOR DEGREE = 64

# ASSOCIATE OF APPLIED SCIENCE NETWORK TECHNICIAN OPTION

### **General Education Requirements**

Number and Title	Credits
BADM 1005—Business Mathematics	s3
or	
MATH—Any College-Level Mathem	natics 3-5
CO/M 1010—Public Speaking	3
ENGL 1010—English I: Introduction	n to
Composition	3
BADM 1020—Business Communica	tion3
or	
ENGL 2010—Technical Report Wri	ting3
POLS 1000—American and Wyomir	ıg
Government	3
or	
HIST 1221—The United States from	18653
Science/Social Science/Visual & Perfe	orming
Arts	3
Wellness Education	2
TOT	AT 20 22

# **Core Courses**

Number and Title	Credits
BMIS 2000-Computer Information S	ystems. 3
CMAP 1615—Operating Systems	3
CMAP 1920—Computer Hardware	
Maintenance	3
CMAP 1930—Wiring and Network	
Technology	3
CMAP 1940—LAN Server Installation	on and
Configuration	3
CMAP 1950—LAN Services and Sup	oport3
CMAP 2575—Wireless Network	-
Administration	3
CMAP 2720—Systems Management	
(Capstone Course)	3
CMAP 2730—Hardening the Infrastru	ucture.3
CMAP 2740-Network Defense and	
Countermeasure	3
CMAP 2970—Internship:	1-6
INET 2010—Database Driven Websi	
TOT	AL 34-39

General Electives selected in		
consultation with advisor	Up to	7

### **Recommended Electives**

Number and Title Credit
ACCT 1050—Practical Accounting3
ACCT 2010—Principles of Accounting I 4
ACCT 2110—Microcomputer Accounting 2
BADM 2030—Business Ethics2
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
Science4
COSC 2030—Computer Science II 4
GRAR 1800—Introduction to Macintosh3
JOUR 1020—Webcasting Practicum I1-2
MGT 1000—Introduction to Supervision 3
PHTO 2650—Digital Imaging I 3
PHTO 2660—Web Page Design3

MINIMUM CREDITS FOR DEGREE = 64

# ASSOCIATE OF APPLIED SCIENCE HELP DESK SPECIALIST OPTION

#### **General Education Requirements**

Number and Title	Credits
BADM 1005—Business Mathematic	.s3
or	
MATH—Any College-Level Mathen	natics 3-5
CO/M 1010—Public Speaking	3
ENGL 1010—English I: Introductio	n to
Composition	3
BADM 1020—Business Communica	ition 3
or	
ENGL 2010—Technical Report Wri	iting 3
POLS 1000—American and Wyomin	ng
Government	3
or	
HIST 1221—The United States from	18653
Science/Social Science/Visual & Perfe	orming
Arts	3
Wellness Education	2
ТОТ	AL 20-22

# **Core Courses**

Number and Title	Credit
BMIS 2000—Computer Information	
Systems	3
CMAP 1615—Operating Systems	3
CMAP 1715-Word Processing:	2
CMAP 1765—Spreadsheet Application	ns:2
CMAP 1815—Database Applications:	2
CMAP 1920—Computer Hardware	
Maintenance	3
CMAP 1930—LAN Wiring and Netw	vork
Technology	3
CMAP 1950—LAN Services and Supp	oort 3
CMAP 2540—Introduction to Help D	esk
Management (Capstone Course)	2

CMAP 2730-Hardening the Infrastructure.3 CMAP 2740-Network Defense and CMAP 2825-Help Desk Fundamentals ..... 4 CMAP 2840—Network Documentation ..... 2 CMAP 2970-Internship: ......3 GRAR 1800-Introduction to Macintosh .... 3 TOTAL 39 General Electives selected in

consultation with advisor ......Up to 9

### **Recommended Electives**

Number and Title Credits
ACCT 1050—Practical Accounting
ACCT 2010-Principles of Accounting I 4
ACCT 2110—Microcomputer Accounting2
BADM 2030—Business Ethics2
BADM 2100-Small Business Practices3
BIOL 2310—Introduction to Geographic
Information Systems
BOTK 2950—Employment Orientation 1
CMAP 1850—Desktop Publishing I:
JOUR 1020—Webcasting Practicum I1-2
MGT 1000—Introduction to Supervision 3
PHTO 2650—Digital Imaging I
PHTO 2660—Web Page Design3

MINIMUM CREDITS FOR DEGREE = 64

# NORTHWEST COLLEGE SKILLS CERTIFICATE **HELP DESK**

This certificate program is designed to develop advanced skills in software use, problem solving, telephone support and outcome tracking, and written and oral communication. These skills are used to provide a high level of service and support to customers-whether they are internal or external.

#### **General Education Requirements**

Number and Title	Credits
CO/M 1030—Interpersonal Com	munication 3
ENGL 1010—English I: Introdu	ction to
Composition	3

### **Core Courses**

Number and Title Credit
BMIS 2000—Computer Information Systems 3
CMAP 1715-Word Processing: 2
CMAP 1765—Spreadsheet Applications:2
CMAP 2540—Introduction to Help Desk
Management2
CMAP 2825—Help Desk Fundamentals 4
CMAP 2970—Internship:2
MGT 1000—Introduction to Supervision

TOTAL CREDITS FOR CERTIFICATE = 24

### 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 foundation courses for students who 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
or
ACCT 2010—Principles of Accounting I4
ACCT 2110—Microcomputer Accounting2
BADM 1000—Introduction to Business 3
BADM 1005—Business Mathematics
BADM 1020—Business Communication3
BMIS 2000—Computer Information
Systems
BOTK 2750—Records and Information
Management1
BOTK 2950—Employment Orientation 1
CMAP 1715—Word Processing:2
ENGL 1010—English I: Introduction to
Composition3
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
TO	TAL 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 degrees that emphasize a practical approach. The Equine Riding and Training degree 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 saddlery companies.

The Equine Business Management degree 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 Graduatic	on
Requirements on pages 30-38	20-23

# **Core Courses**

Number and Title Credits
ANSC 2430—Comparative Anatomy/
Physiology of Domestic Animals4
EQST 1510—Equine Nutrition2
or
ANSC 2020—Feeds and Feeding 4
EQST 1520—Horse Production I 3
EQST 1525—Horse Production II3
EQST 1540—Applied Horse & Stall
Care I1
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 I2
EQST 2520—Equine Breeding 3
EQST 2540—Applied Horse & Stall
Care III1
EQST 2545—Applied Horse & Stall
Care IV1
EQST 2680—Western Horsemanship3

General Electives selected in
consultation with advisor6

MINIMUM CREDITS FOR DEGREE = 64

### ASSOCIATE OF APPLIED SCIENCE EQUINE BUSINESS MANAGEMENT

#### **General Education Requirements**

Number and Title	Credits
Students should refer to the Gradua	ation
Requirements on pages 30-38	20-23

### **Core Courses**

N

Number and Title	Credits
ACCT 2010-Principles of Accounting	ng I 4
AGEC 2010—Farm and Ranch Busin	ness
Records	
AGRI 1010—Computers in Agricultu	ıre2
or	
BMIS 2000—Computer Information S	ystems 3
BADM 2010—Business Law	
BADM 2100—Small Business Practic	ces3
ECON 1010-Macroeconomics	
or	
ECON 1020-Microeconomics	
or	
AGEC 1010—Agriculture Economic	s I 3
or	
AGEC 1020—Agriculture Economic	s II 3
EQST 1510-Equine Nutrition	3
or	
ANSC 2020—Feeds & Feeding	
EQST 1520-Horse Production I	
EQST 1525—Horse Production II	3
EQST 1550—Equine Evaluation I	2
or	
EQST 2520—Equine Breeding	3
or	
EQST 2680—Western Horsemanshi	р3
EQST 2690—Hunt Seat Equitation.	
MKT 1000-Sales	3
or	
MKT 2100—Principles of Marketing	3
MGT 2100—Principles of Manageme	ent 3
EQST 2515—Horse Show/Clinic/Ev	rent
Management	2
ТОТА	AL 41-42

MINIMUM CREDITS FOR DEGREE = 64

# ASSOCIATE OF APPLIED SCIENCE FARRIER BUSINESS MANAGEMENT

The Farrier Business Management Program prepares students with needed skills in both farrier science and business. Students develop practical accounting, business technology, and management skills. Students also acquire background in equine anatomy and physiology, gait and lameness problems, approaches to equine balance, and the ways conformation relates to soundness and movement. Classroom time is complimented with significant time at the forge. Horses are provided so students have ample handson experience. Students become skilled in making corrective and therapeutic shoes as well as in doing more standard shoeing.

#### **General Education Requirements**

Number and Title	Credits
Students should refer to the Graduati	on
Requirements on pages 30-38	20-23

### **Core Courses**

Number and Title Credits
ACCT 1050—Practical Accounting
AGEC 2020—Farm and Ranch Business
Management (Capstone Course)4
AGRI 1010—Computers in Agriculture 2
BADM 2100—Small Business Practices 3
EQST 1520—Horse Production I 3
EQST 1550—Equine Evaluation I2
EQST 1680—Horse Handling and Behavior2
EQST 1805—Farrier Science I
EQST 1810—Farrier Science II
EQST 1815—Production Shoeing I 3
EQST 1820—Production Shoeing II3
EQST 1825—Production Shoeing III 3
EQST 1830—Production Shoeing IV 3
EQST 1850—Blacksmithing I2
WELD 1600—General Arc Welding2-3
TOTAL 40-41

General Electives selected in	
consultation with advisor7-9	

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 coursework 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**

Credits

### Number and Title

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	0

### **Recommended Electives**

EQST 1540-Applied Horse and Stall Care	I 1
EQST 1805—Farrier Science I	2
EQST 1850—Blacksmithing 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 construction and management, horse and mule packing, big game guiding, livestock care and handling, basic horsemanship, backcountry 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.

Number and Title	Credits
EQST 2665—Outdoor Guide	Skills7

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 welding processes. Students are encouraged to complete the two-year program, although a Northwest College certificate (60 credits, see page 38) 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 Communicat	
MATH 1510—Technical Mathematic	cs I (or
equivalent)	
POLS 1000—American and Wyomin	g
Government	
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 Pro	ocesses 4
WELD 1800—Materials Evaluation .	3
WELD 1860—Welding Fabrication .	4
WELD 1870—Advanced Metal Fabri	ication
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 Production4
WELD 2985—Welding Seminar
(Capstone Course)4
Wellness Education
General Education Requirements6
Electives
TOTAL 69-72

#### TOTAL CREDITS FOR DEGREE = 69-72

\* Students should refer to the Graduation Requirements on pages 30–38.

# NORTHWEST COLLEGE COMPREHENSIVE SKILLS CERTIFICATE WELDING TECHNOLOGY

Number and Title	Credits
MATH 1510—Technical Mathematic	es I (or
equivalent)	3
WELD 1555—Welding Technology S	Safety
and Problem Solving	2
WELD 1650—Print Reading	3
WELD 1705—Welding Processes	4
WELD 1765—Advanced Welding Pro	cesses 4
WELD 1800—Materials Evaluation	3
WELD 1860—Welding Fabrication	4
WELD 1870—Advanced Metal Fabri	cation
Techniques	4
WELD 2750—Metals Production	4
Elective	3
TO	TAT 24

TOTAL 34

TOTAL CREDITS FOR CERTIFICATE = 34

# NORTHWEST COLLEGE SKILLS CERTIFICATE GMAW WELDING

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

### Core Courses

Number and Title	Credits
MATH 1510—Technical Mathematic	cs I 3
WELD 1555—Welding Technology S	Safety
and Problem Solving	2
WELD 1650—Print Reading	
WELD 1700—General Welding	
WELD 1770-GMAW - FCAW	4
WELD 1860—Welding Fabrication	4
WELD 1870—Advanced Metal Fabri	cation
Techniques	4
WELD 2750—Metals Production	4
ТО	TAL 27

#### Elective

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

# NORTHWEST COLLEGE SKILLS CERTIFICATE GTAW WELDING

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

### **Core Courses**

Number and Title Credit	ts
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 2	7

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

TOTAL CREDITS FOR CERTIFICATE = 30

# NORTHWEST COLLEGE SKILLS CERTIFICATE ROBOTICS TECHNOLOGY

Students who complete this certification program will acquire advanced skills that are necessary in the planning, setup, operation, and safety requirements of using a Computer Numeric Controlled (CNC) plasma cutting machine.

# **Core Courses**

Number and Title	Credits
MATH 1510—Technical Mathematic	es I 3
WELD 1555—Welding Technology S	Safety
and Problem Solving	2
WELD 1705-Welding Processes	4
WELD 1765—Advanced Welding Pr	ocesses 4
WELD 1860—Welding Fabrication	4
WELD 1870—Advanced Metal Fabr	ication
Techniques	4
WELD 1940—Robotics Technology.	4

TOTAL CREDITS FOR CERTIFICATE = 25

49