

# ENVIRONMENTAL STUDIES

College of Rural and Community Development  
Bristol Bay Campus  
907-842-5109  
[www.uaf.edu/bbc/](http://www.uaf.edu/bbc/)

## Certificate

Minimum Requirements for Certificate: 34 – 39 credits

This program addresses many of the environmental issues influencing Alaska communities and provides basic academic preparation for entry-level vocational environmental careers. The program serves as a stepping-stone into science-related associate or baccalaureate programs.

This program may be especially of interest to individuals employed by, and/or interested in employment with state, federal or tribal agencies or other groups providing natural resource management services. It is recommended that students have completed a high school lab-based science, biology or chemistry course as well as algebra due to the science focus of this program.

## Certificate Program

1. Complete the general university requirements (page 95).
2. Complete the certificate requirements (page 97).\*
3. Complete the following:
  - a. Complete one of the following communication courses:  
ENGL F111X—Introduction to Academic Writing (3)  
or ABUS F170—Business English (3) .....3
  - b. Complete the following:  
DEV M F105—Intermediate Algebra (3)  
or MATH/CS/STAT at the 100 level or higher .....3
  - c. Complete one of the following human relations courses:  
ANTH F100X/SOC F100X—Individual, Society and Culture (3)  
or ABUS F154—Human Relations (3)  
or other program-approved discipline-based human relations course .....3

4. Complete the following program requirements:\*
  - a. Complete two science foundation courses:  
BIOL F103X—Biology and Society (4)  
or BIOL F104X—Natural History of Alaska (4)  
or BIOL F115X—Fundamentals of Biology I (4) .....4  
CHEM F103X—Basic General Chemistry (4)  
or CHEM F105X—General Chemistry I (4) .....4
  - b. Complete the following:  
ENVI F101—Introduction to Environmental Science .....3  
ENVI F110—Introduction to Water Quality I: Measurement .....1  
ENVI F130—Introduction to the National  
Environmental Policy Act .....1  
ENVI F160—Internship in Environmental Studies ..... 1 – 2  
ENVI F260—Field Techniques for Environmental Technicians .....2  
ENVI F265—Introduction to Methods in  
Environmental Studies .....2  
GEOG F111X—Earth and Environment:  
Elements of Physical Geography .....4
  5. Complete 3 – 4 credits from the following electives:  
BIOL F104X—Natural History of Alaska .....4  
BIOL F115X—Fundamentals of Biology I .....4  
CHEM F104X—Beginnings in Biochemistry .....4  
CHEM F105X—General Chemistry I .....4  
DEVS F100—Introduction to Science .....4  
FISH F101—Introduction to Fisheries .....3  
HLRM F130—Research Field Logistics .....2  
NRM F101—Natural Resources Conservation and Policy .....3  
RD F250—Grant Writing for Community Development ..... 1 – 3  
STAT F200X—Elementary Probability and Statistics\*\* .....3  
Advisor-approved elective\*\*\* ..... 1 – 3
  6. Minimum credits required ..... 34 – 39
- \* Students must earn a C- grade or better in each course.  
\*\* Cannot be used for elective credit if used as computational credit.  
\*\*\* Similar level and subject matter.

## Certificate Requirements

### Communication . . . . . 2 – 3 Credits

Complete one of the following:

- ENGL F111X—Introduction to Academic Writing.....(3)
- ABUS F170—Business English.....(3)
- ABUS F271—Business Communications .....(3)
- ENGL F211X—Academic Writing about Literature.....(3)
- ENGL F212—Business, Grant and Report Writing\* .....(3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences .....(3)
- COMM F131X—Fundamentals of Oral Communication: Group Context .....(3)
- COMM F141X—Fundamentals of Oral Communication: Public Context.....(3)  
or successful completion of competency test
- DEVS F104—University Communications..... (1 – 3)
- DEVS F105—Intensive Reading Development .....(3)
- Other program-approved discipline-based communication course or  
discipline-based courses with embedded communication content..... (2 – 3)

\* ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

### Computation . . . . . 2 – 3 Credits

Complete one of the following:

- Any course at the F100-level or above in mathematical sciences  
(computer science, math or statistics). .....(3)
- ABUS F155—Business Math.....(3)
- DEVM F105—Intermediate Algebra .....(3)
- ECE F117—Math Skills for Early Childhood Educators.....(3)
- HLTH F116—Mathematics in Health Care .....(3)
- HUMS F117—Math Skills for Human Services .....(3)
- TTCH F131—Mathematics for the Trades .....(3)
- Other program-approved discipline-based computation course or  
discipline-based courses with embedded computation content. .... (2 – 3)

### Human Relations . . . . . 2 – 3 Credits

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture(s) .....(3)
- ABUS F154—Human Relations .....(3)
- ANL F287—Teaching Methods for Alaska Native Languages (h).....(3)
- ECE F104—Child Development: Prenatal, Infants and Toddlers (s) .....(3)
- ECE F107—Child Development II: Preschool and Primary Years (s) .....(3)
- ED/PSY F245—Child Development (s) .....(3)
- HLTH F106—Human Behavior in Health Care (s).....(3)
- HUMS F120—Cultural Diversity in Human Services.....(3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND  
RHS F115—Issues of Personal Development .....(2)
- Other program-approved discipline-based human relations or  
discipline-based courses with embedded human relations content. .... (2 – 3)

Major specialty at least ..... 21 Credits

Electives to total ..... 30 Credits

## Associate of Applied Science Requirements

### Written Communication . . . . . 6 Credits

- ENGL F111X—Introduction to Academic Writing.....(3)

Complete one of the following:

- ABUS F271—Business Communications .....(3)
- ENGL F211X—Academic Writing about Literature.....(3)
- ENGL F212—Business, Grant and Report Writing\* .....(3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences .....(3)

\* ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

### Oral Communication . . . . . 3 Credits

Complete one of the following:

- COMM F131X—Fundamentals of Oral Communication: Group Context .....(3)
- COMM F141X—Fundamentals of Oral Communication: Public Context.....(3)  
or successful completion of competency test

### Computation . . . . . 3 Credits

Complete one of the following:

- Any course at the F100-level or above in mathematical sciences  
(computer science, math or statistics). .....(3)
- ABUS F155—Business Math.....(3)
- DEVM F105—Intermediate Algebra .....(3)
- ECE F117—Math Skills for Early Childhood Educators.....(3)
- HLTH F116—Mathematics in Health Care .....(3)
- HUMS F117—Math Skills for Human Services .....(3)
- TTCH F131—Mathematics for the Trades .....(3)
- Other program-approved discipline-based computation course or  
discipline-based courses with embedded computation content. .... (3)

### Human Relations . . . . . 3 Credits

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture (s) .....(3)
- ABUS F154—Human Relations .....(3)
- ANL F287—Teaching Methods for Alaska Native Languages (h).....(3)
- ECE F104—Child Development: Prenatal, Infants and Toddlers (s) .....(3)
- ECE F107—Child Development II: Preschool and Primary Years (s) .....(3)
- ED/PSY F245—Childhood Development (s) .....(3)
- HLTH F106—Human Behavior in Health Care (s) .....(3)
- HUMS F120—Cultural Diversity in Human Services.....(3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND  
RHS F115—Issues of Personal Development .....(2)
- Other program-approved discipline-based human relations course or  
discipline-based courses with embedded human relations content. .... (3)

Major specialty at least ..... 30 Credits

Electives to total ..... 60 Credits

Minimum credits required for degree ..... 60 Credits