

## IV. Critical Issues

### 1 Agriculture & Food Security

#### Description:

Alaska's agricultural opportunities and their relationship to food security are a critical issue because Alaska imports over 90 percent of its food. To become adaptable to economic, climate and other changes, it is critical to provide support to growers in the state. CES and AFES are well positioned to provide information about high latitude agriculture and horticulture. Areas emphasized in the close collaboration of CES and AFES include agronomic crop and livestock production, commercial and home horticulture best practices, new technology applications, IPM and control of invasive pests, youth involvement in agriculture, best practices for controlled environments small-scale agribusiness, and cultivar testing for climate-adapted crops.

**Term:** Long

#### Science Emphasis Areas

Agroclimate Science

Sustainable Agricultural Production Systems

### 2 Natural Resources, Ecosystems & Sustainable Energy

#### Description:

Collaborative efforts are key to ensuring proper stewardship of Alaska's complex ecosystems. CES and AFES faculty and staff will maintain partnerships and participate in multi-state and integrated activities with stakeholder groups, government agencies and other institutions that enhance outreach regarding natural resource management and renewable energy sources. Faculty and staff will work to expand capacity for public involvement in natural resource, ecosystem and sustainable energy issues, including maintaining online platforms for education and engagement. Public workshops, presentations and consultations will offer opportunities for stateholders to increase their awareness of biomass and other sustainable energies.

**Term:** Long

#### Science Emphasis Areas

Bioeconomy, Bioenergy, and Bioproducts

Environmental Systems

### 3 Healthy Individuals, Families & Communities

#### Description:

Alaska faces challenges such as high rates of botulism, obesity, food insecurity and other risks to public health. Cold climate housing also presents challenges in balancing fresh air flow with energy conservation. To address such concerns, CES faculty and staff will offer educational opportunities regarding nutrition and physical activity, chronic disease prevention and management, home modifications, air quality and energy efficiencies, food safety practices and food preservation techniques.

**Term:** Long

#### Science Emphasis Areas

Family & Consumer Sciences

Food Safety

Human Nutrition

### 4 4-H & Youth Development

#### Description:

Research shows that to increase resilience and reduce risky behaviors, youth need connections to caring

adults. Faculty and staff will continue to provide mentorship and life skills programming to youth. CES seeks to increase participation in STEAM activities as well as provide youth with local and statewide opportunities for civic engagement. 4-H educators will continue to offer culturally relevant activities for the many diverse groups in Alaska.

**Term:** Long

**Science Emphasis Areas**

Education and Multicultural Alliances

Youth Development