UNIVERSITY OF ALASKA EDUCATION AND TRAINING PROGRAMS RELATED TO OIL AND GAS WORKFORCE

REFERENCE HANDOUT

PREPARED BY:
UNIVERSITY OF ALASKA STATEWIDE OFFICES OF WORKFORCE PROGRAMS AND INSTITUTIONAL RESEARCH AND BUDGET

JULY 2013
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UNIVERSITY OF ALASKA (UA) OVERVIEW

Organizational Charts

www.alaska.edu/OrgCharts/  Link to organizational charts for UA Statewide, UA Anchorage, UA Fairbanks and UA Southeast.

UA in Review

www.alaska.edu/swbir/ir/ua-in-review/  Link to the UA in Review, a comprehensive, system-wide publication reporting on the University of Alaska, organized around the structure of the University system including the four major administrative units: UA Statewide; UA Anchorage; UA Fairbanks; and, UA Southeast.
EDUCATION AND TRAINING PROGRAMS

ACADEMIC PROGRAMS BY UA CLUSTER AND DEGREE LEVEL

The University of Alaska utilizes Career Clusters as a way to group University of Alaska education and training programs into broad industry sector career areas. The following education and training programs are associated with oil and gas industries and occupations and are categorized using University of Alaska Career Clusters designations. See page 10 for additional information on UA Career Clusters. See page 15 for list of Acronyms.

ARCHITECTURE AND CONSTRUCTION
AAS, Apprenticeship Technology
AAS, Archit & Engr Technology
AAS, Construction Management
AAS, Construction Technology
AAS, Construction Trades Technology
AAS, Drafting Technology
AAS, Maintenance Technology
AAS, Refrig & Heat Technology
AAS, Weld & NonDestruct Test Tech
BS, Construction Management
CT1, Architectural Drafting
CT1, Civil Drafting
CT1, Construction Technology
CT1, Drafting Technology
CT1, Indust Weld Tech
CT1, Mech & Elect Drafting
CT1, NonDestruct Testing
CT1, Structural Drafting
CT1, Welding
CT2, Construction Trades Technology
CT2, Drafting Technology
CT2, Refrig & Heat Technology
GCRT, Construction Management
MS, Project Management
OEC, Bldg Enrg Rtrft Tech OE
OEC, CAD for Building Construction
OEC, Commercial HVAC Syst
OEC, Construction Technology
OEC, CTT: Facilities Maintenance
OEC, Electrical
OEC, Entry Level Welder
OEC, Residential Air Cond & Ref
OEC, Residential Heat/Vent
OEC, Welding Technology

ENERGY, ENVIRONMENTAL SCIENCE, AND GREEN JOBS
BS, Environmental Science
CT2, Power Generation
CT2, Powerplant
CT2, Safety, Hlth & Envn Aware Tech
GCRT, Environmental Reg & Permitting
MO, Appl Environ Science & Techno
MS, Appl Environ Science & Techno
MS, Environmental Engineering
MS, Environmental Quality Engr
MS, Environmental Quality Science

FISHERIES, AGRICULTURE, AND NATURAL RESOURCES
AAS, Fisheries Technology
BA, Fisheries
BS, Fisheries
BS, Fisheries Science
BS, Geological Science
BS, Geology
BS, Marine Biology
BS, Natural Resources Management
CT2, Fisheries Technology
MNRMG, Natural Res Mgmt & Geography
MS, Fisheries
MS, Geology
MS, Marine Biology
MS, Natural Resources Management
MS, Oceanography
MS, Resource & Applied Economics
PHD, Fisheries
PHD, Geology
PHD, Marine Biology
PHD, Natural Res. & Sustainability
PHD, Oceanography
HEALTH SCIENCES
AA, Nursing Science
AAS, All Hlth Non-Major
AAS, Community Health
AAS, Dental Assistant
AAS, Dental Assisting
AAS, Dental Hygiene
AAS, Fire & Emergency Services Tech
AAS, Fire Science
AAS, Health Information Mgt
AAS, Health Science
AAS, Medical Assistant
AAS, Medical Assisting
AAS, Medical Lab Technology
AAS, Nursing
AAS, Paramedical Tech
AAS, Pre-Major Dental Assisting
AAS, Pre-Major Dental Hygiene
AAS, Pre-Major Medical Assisting
AAS, Pre-Major Medical Lab Tech
AAS, Pre-Major Nursing
AAS, Pre-major Paramedical Tech
AAS, Premajor Radiologic Technology
AAS, Radiologic Technology
BS, Dental Hygiene
BS, Dietetics
BS, Health Sciences
BS, Medical Technology
BS, Nursing Science
BS, Nutrition
BS, Physical Education
BS, Pre-Major Dental Hygiene
BS, Pre-Major Dietetics
BS, Pre-Major Health Science (BS)
BS, Pre-Major Nursing
BS, Pre-Major Nursing Science
CT1, Community Wellness Advocate
CT1, Health Information Mgt
CT1, Nursing
CT1, Pre-Radiologic Technology
CT2, Community Health
CT2, Community Wellness Advocate
CT2, Dental Assistant
CT2, Dental Assisting
CT2, Health Care Reimbursement
CT2, Health Info Mgt Coding Spec
CT2, Health Information Mgt
CT2, Healthcare Privacy & Security
CT2, Medical Assistant
CT2, Medical/Dental Reception
CT2, Practical Nursing
CT2, Pre-Major Dental Assisting
CT2, Pre-Nursing Qualifications
CT2, Veterinary Science
GCRT, Dietetic Internship
GCRT, Nursing Education
GCRT, Psychia & Mentl Hlth Nur Pract
MPH, Public Health Practice
MS, Nursing Science
OEC, Clinical Assistant
OEC, Community Wellness Advocate
OEC, Healthcare Information Tech
OEC, Limited Radiography
OEC, Medical Billing
OEC, Medical Coding
OEC, Medical Office Coding
OEC, Medical Office Reception
OEC, Medical Office Supp
OEC, Nurse Aide
OEC, Pharmacy Technology
OEC, Phlebotomist
OEC, Rural Nutrition Services
OEC, Veterinary Assisting

LAW, PUBLIC SAFETY, AND SECURITY
AAS, Emergency Services
BEM, Emergency Management
CT1, Indust Safety Program Support

MINING, MANUFACTURING, AND PROCESS TECHNOLOGY
AAS, Industrial Proc Instrumentatn
AAS, Industrial Technology
AAS, Occupational Safety & Health
AAS, Process Technology
BI, Premajor - Mining Engineering
BI, Premajor-Petroleum Engineering
BS, Mining Engineering
BS, Petroleum Engineering
CT2, Industrial Technology
CT2, Instrumentation Technology
MS, Mineral Preparation Engineer
MS, Mining Engineering
MS, Petroleum Engineering

SCIENCE, TECHNOLOGY, ENGINEERING, AND RESEARCH
AAS, Geomatics
AAS, Technology
AS, Associate of Science
BA, Anthropology
BA, Biological Sciences
TRAINING PROGRAMS

UA is the state’s largest supplier of workforce training. In addition to baccalaureate and master’s degree programs such as nursing, engineering and accounting that involve internships and lead directly to employment, UA campuses provide hundreds of short-term training programs that get people out of the classroom and into a job in 1-2 years or less.

The Mining and Petroleum Training Service (MAPTS) is of particular interest for oil and gas training programs. In its 30+ year history, MAPTS has evolved to provide the following types of training programs:

- OSHA.
- MSHA.
- EPA.
- DOT.
- IADC Well Control & related classes, NSTC, HAZWOPER, ECS.
- Entry Level Roustabout.
- DEC Classes.
- CITS Cook Inlet Training.
- NSTC+H2S.
- IADC WellCAP.
- IADC Intro to Well Control.
- IADC Well Intervention (pending IADC approval).
- Rigging – Entry Level.
- Mechanical Maintenance
- Pre- and post- employment training for a variety of employers and agencies in the resource industries and professional training and development, design and evaluation, as well as consulting services.
- Other customized industry related certification training.

Mining and Petroleum Training Service
Bill Bieber, Executive Director
(Main Office)
162 College Road
Soldotna, Alaska 99669
Phone: (907) 262-2788
Fax: (907) 262-2812

(Anchorage Office)
3901 Old Seward Hwy - University Center Mall
P.O. Box 240428
Anchorage, Alaska 99524
Phone: (907) 786-6413
Fax: (907) 786-6414
BEST PRACTICES

CERTIFICATE & DEGREE PROGRAMS, COURSEWORK FOR NON-DEGREE SEEKING STUDENTS

Examples of innovative programs related to oil and gas workforce development include:

- Industry led Health, Safety, Environment (HSE) program in development
- Emergency Services programs, for example:
  - www.ctc.uaf.edu/programs/emergency/
  - www.uaa.alaska.edu/alliedhealth/academics/fire.cfm
- Marine Technology, Port and Coastal Engineering
  - www.uas.alaska.edu/career_ed/maritime/
  - www.uaa.alaska.edu/pathways/upload/Civil-Grad-MS-MCE.pdf
- Arctic and Petroleum Engineering, Geoscientists, Arctic Exploration, for example:
  - Department of Petroleum Engineering: http://cem.uaf.edu/pete
  - Civil Engineering Program (Arctic Engineering) http://cem.uaf.edu/cee/degrees.aspx
  - Geoscience
    - http://www.uaf.edu/geology/
    - http://www.uaa.alaska.edu/geology/

APPRENTICESHIP PROGRAMS

UAA – CTC APPRENTICESHIP TECHNOLOGIES
WWW.UAA.ALASKA.EDU/CTE/ACADEMICS/APPRENTICESHIP/INDEX.CFM

The Apprenticeship Technologies program is a 60 credit Associate of Applied Science degree, coordinated and delivered collaboratively by UAA, UAF and UAS.

- Integrates general coursework and training for career and technical occupations
- Individuals must complete an apprenticeship registered by the US Department of Labor, Office of Apprenticeship and hold journey worker status.
- Students are encouraged to start while still an apprentice, and graduate after completing both the coursework and apprenticeship.
- Journey workers can apply at any time.

Up to 38 credits can be transcripted for approved apprenticeship programs.

Graduates can seamlessly enroll in the Bachelor of Science, Technology (UAA) or Bachelor of Technology (UAF) degree. See more at: www.uaa.alaska.edu/cte/academics/apprenticeship/index.cfm#sthash.WBQfZOOI.dpuf
The A.A.S. degree in apprenticeship technologies provides vocational training and supporting course work to prepare students for the rapidly changing global workplace. The program also helps Alaska industries by training workers who can meet increasing certification requirements which reflect complex business and industrial standards.

Program Overview

The apprenticeship technologies program is a 60-credit A.A.S. degree delivered collaboratively through UAA, UAF and UAS. The practical integration of general course work and training for vocational and technical trades specifically reflects the commitment of the university to high-quality instruction and public service. Individuals earning this degree must complete an apprenticeship program approved by the U.S. Department of Labor, and they must hold journey-level status in trades recognized by the U.S. Department of Labor, Bureau of Apprenticeship and Training.

Students declaring a major in apprenticeship technologies must present documentation of acceptance into an apprenticeship program approved by the U.S. Department of Labor, Bureau of Apprenticeship and Training. The appropriate College of Rural Alaska campus will review the documentation and may recommend up to 38 credits of course work following completion of all courses listed below. Students are encouraged to begin the required courses while completing the apprenticeship program to expand the quality and breadth of the program. Students who complete this program may be eligible to enroll in the B.S. technology degree program at UAA or the B.T. technology degree program at UAF.

Roger Weggel, Program Coordinator
Apprenticeship Technologies
UAF Community and Technical College
P.O. Box 758080
Fairbanks, Alaska 99775
Phone: 455-2847
Email: rfweggel@alaska.edu

The associate of applied science degree is a two-year degree awarded in a specific career or occupational field of experience. Residency requirement is 15 UAS semester credits.

The Apprenticeship Technology program is available to individuals who have completed a formal apprenticeship program and hold journeyman-level status in trades recognized by the U.S. Department of Labor, Bureau of Apprenticeship and Training. This degree is available through campuses of the University of Alaska that offer the required academic credit courses. Upon completion of all the academic credit courses, the apprenticeship program will be evaluated and appropriate credit awarded. Fees may be involved. No more than 38 credit hours may be awarded for the formal apprenticeship program. Contact Career Education for assistance with course planning toward the Associate of Applied Science degree.
MILITARY

See handout titled, “UA Matrix of MAU Policies: Awarding Credit for Military Training”.

DUAL ENROLLMENT/DUAL CREDIT

Dual Credit Policies and Practices at UAF, UAA and UAS (Board of Regents Meeting, September 2012)

www.alaska.edu/files/bor/120927Ref13_Dual_Credit_Policies_Practices.pdf

UA CAREER CLUSTERS, NASDCTEC/DOL CLUSTERS, O’NET CLUSTERS

Career clusters and career pathways are a useful tool to organize and categorize groupings of occupations as well as education and training programs. At UA, 15 career clusters are used for the purpose of organizing education and training programs. As utilization of this classification method becomes even more widespread in Alaska, we are undertaking a conversation with partners to better understand current usage of this classification system to ensure consistency.

The National Association of State Directors of Career and Technical Education Consortium (NASDCTEc) spearheaded the national effort to develop and utilize Career Clusters. Below is a cross-walk between UA Career Clusters and the NASDCTEc career clusters. www.careertech.org/career-clusters/

O’NET career clusters “contain occupations in the same field of work that require similar skills. Students, parents, and educators can use Career Clusters to help focus education plans towards obtaining the necessary knowledge, competencies, and training for success in a particular career pathway.” www.onetonline.org/find/career

<table>
<thead>
<tr>
<th>University of Alaska Career Clusters</th>
<th>NASDCTEc Clusters (aka DOL Cluster)</th>
<th>O’NET Career Clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture &amp; Construction</td>
<td>Architecture and Construction Manufacturing Transportation, Distribution and Logistics Science, Technology, Engineering and Mathematics</td>
<td></td>
</tr>
<tr>
<td>Arts, AV Technology, &amp; Communications</td>
<td>Arts, Audio/Video Technology and Communications Education and Training Cluster</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| Business, Management and Administration      | Business, Management and Administration  
Marketing Sales and Service  
Finance                                                                                       |
| Education & Training                         | Education and Training  
Human Services  
Science, Technology, Engineering and Mathematics  
Agriculture, Food and Natural Resource                                                   |
| Government, Public Policy, & Administration  | Government and Public Administration  
Human Services  
Science, Technology, Engineering and Mathematics                                              |
| Health Sciences                              | Health Science  
Law, Public Safety, Corrections and Security  
Science, Technology, Engineering and Mathematics                                             |
| Hospitality & Tourism                        | Hospitality and Tourism  
Human Services                                                                                      |
| Human Services                               | Human Services  
Education and Training  
Business, Management and Administration  
Hospitality and Tourism  
Health Science                                                                                     |
| Information & Technology                     | Information Technology  
Business, Management and Administration  
Manufacturing  
Architecture and Construction                                                               |
| Law & Public Safety                          | Law, Public Safety, Corrections and Security  
Business, Management and Administration  
Manufacturing  
Human Services                                                                                     |
| Mining, Manufacturing, & Process Technology  | Manufacturing  
Science, Technology, Engineering and Mathematics  
Agriculture, Food and Natural Resource                                                         |
| Science, Technology, Engineering, Research   | Science, Technology, Engineering and Mathematics  
Manufacturing  
Architecture and Construction  
Information Technology  
Agriculture, Food and Natural Resource                                                             |
| Transportation, Distribution, & Logistics    | Transportation, Distribution, and Logistics  
Business, Management and Administration  
Architecture and Construction  
Science, Technology, Engineering and Mathematics                                                     |
### Number of Students Graduated 2007-2011 by Oil and Gas Clusters

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture and Construction</td>
<td>111</td>
<td>113</td>
<td>102</td>
<td>156</td>
<td>143</td>
</tr>
<tr>
<td>Energy, Environmental Science, and Green Jobs</td>
<td>20</td>
<td>26</td>
<td>19</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>Fisheries, Agriculture, and Natural Resources</td>
<td>65</td>
<td>71</td>
<td>74</td>
<td>73</td>
<td>68</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>409</td>
<td>436</td>
<td>400</td>
<td>485</td>
<td>476</td>
</tr>
<tr>
<td>Law, Public Safety, and Security</td>
<td>19</td>
<td>23</td>
<td>15</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>Mining, Manufacturing, &amp; Process Technology</td>
<td>99</td>
<td>106</td>
<td>112</td>
<td>118</td>
<td>132</td>
</tr>
<tr>
<td>Science, Technology, Engineering, and Research</td>
<td>325</td>
<td>332</td>
<td>371</td>
<td>411</td>
<td>421</td>
</tr>
<tr>
<td>Transportation, Distribution and Logistics</td>
<td>168</td>
<td>161</td>
<td>171</td>
<td>144</td>
<td>187</td>
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<tr>
<td>Total</td>
<td>1216</td>
<td>1268</td>
<td>1264</td>
<td>1416</td>
<td>1480</td>
</tr>
</tbody>
</table>

### Number of Students Graduated 2007-2011 Who Were Employed One Year After Exit

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture and Construction</td>
<td>86</td>
<td>93</td>
<td>64</td>
<td>111</td>
<td>106</td>
</tr>
<tr>
<td>Energy, Environmental Science, and Green Jobs</td>
<td>16</td>
<td>23</td>
<td>14</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Fisheries, Agriculture, and Natural Resources</td>
<td>46</td>
<td>45</td>
<td>47</td>
<td>42</td>
<td>54</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>350</td>
<td>371</td>
<td>346</td>
<td>412</td>
<td>384</td>
</tr>
<tr>
<td>Law, Public Safety, and Security</td>
<td>16</td>
<td>21</td>
<td>14</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>Mining, Manufacturing, &amp; Process Technology</td>
<td>85</td>
<td>81</td>
<td>93</td>
<td>105</td>
<td>99</td>
</tr>
<tr>
<td>Science, Technology, Engineering, and Research</td>
<td>225</td>
<td>229</td>
<td>266</td>
<td>311</td>
<td>278</td>
</tr>
<tr>
<td>Transportation, Distribution and Logistics</td>
<td>110</td>
<td>113</td>
<td>120</td>
<td>105</td>
<td>136</td>
</tr>
<tr>
<td>Total</td>
<td>934</td>
<td>976</td>
<td>964</td>
<td>1108</td>
<td>1101</td>
</tr>
</tbody>
</table>
Full listing of UA Research and Documentation Centers can be found in Board of Regents Policy at [www.alaska.edu/bor/policy/10-02.pdf](http://www.alaska.edu/bor/policy/10-02.pdf)

### UA Grants Related to Oil and Gas Industry

<table>
<thead>
<tr>
<th>FY</th>
<th>Grant Title</th>
<th>Max Fund Amount</th>
<th>Grant Type</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>North Slope Arctic Fox Diagnostic and Research Initiative: Health Status and Zoonotic Diseases</td>
<td>14,040.0</td>
<td>Research/Development</td>
<td>BP Exploration AK Inc</td>
</tr>
<tr>
<td>2008</td>
<td>Oil Spill Recovery Graduate Fellowship for James Alanko</td>
<td>50,033.0</td>
<td>Research/Development</td>
<td>Prince William Sound Science Center</td>
</tr>
<tr>
<td>2008</td>
<td>Environmental Studies of Port Valdez, Alaska - 2008</td>
<td>216,274.0</td>
<td>Research/Development</td>
<td>Alyeska Pipeline Service Co.</td>
</tr>
<tr>
<td>2008</td>
<td>Experimental Study on Bending Behavior of Natural Gas Pipeline at the Boundary of Permafrost and Non-permafrost: Planning a Field Experiment for West Siberia</td>
<td>6,997.3</td>
<td>Research/Development</td>
<td>Hokkaido University</td>
</tr>
<tr>
<td>2008</td>
<td>Physical oceanographic measurements in the Klondike and Burger prospects of the Chukchi Sea</td>
<td>90,217.0</td>
<td>Research/Development</td>
<td>Conoco</td>
</tr>
<tr>
<td>2008</td>
<td>Conoco-LAB: Assessment of the planktonic communities in the Klondike and Burger prospect regions of the Chukchi Sea</td>
<td>6,075.0</td>
<td>Research/Development</td>
<td>Conoco</td>
</tr>
<tr>
<td>2008</td>
<td>ConocoPhilips 2008 Environmental Studies Program in Chukchi Sea: Benthic Ecology</td>
<td>33,000.0</td>
<td>Research/Development</td>
<td>Conoco</td>
</tr>
<tr>
<td>2009</td>
<td>Oil in Ice: Transport, Fax, and Potential Exposure</td>
<td>63,156.0</td>
<td>Research/Development</td>
<td>Oil Spill Recovery Institute</td>
</tr>
<tr>
<td>2009</td>
<td>Environmental Studies of Port Valdez, Alaska - 2009</td>
<td>225,646.0</td>
<td>Research/Development</td>
<td>Alyeska Pipeline Service Co.</td>
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<tr>
<td>2009</td>
<td>Schrader Bluff Enhanced Oil Recovery</td>
<td>332,000.0</td>
<td>Research/Development</td>
<td>BP Exploration AK Inc</td>
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<tr>
<td>2009</td>
<td>ConocoPhilips 2008 Environmental Studies Program in Chukchi Sea: Benthic Ecology</td>
<td>299,782.0</td>
<td>Research/Development</td>
<td>Conoco</td>
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<tr>
<td>2009</td>
<td>Phase 2: Conoco: Assessment of the planktonic communities in the Klondike and Burger prospect regions of the Chukchi Sea</td>
<td>117,546.0</td>
<td>Research/Development</td>
<td>Conoco</td>
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<tr>
<td>2009</td>
<td>ISER Energy Related Programs</td>
<td>300,000.0</td>
<td>Research/Development</td>
<td>President’s Special Projects</td>
</tr>
<tr>
<td>2009</td>
<td>UAF Phased Research Proposal to Evaluate the Effects of Dispersed Oil on Cold Water Environments Of the Beaufort and Chukchi Seas</td>
<td>197,000.0</td>
<td>Research/Development</td>
<td>NewFields</td>
</tr>
<tr>
<td>2009</td>
<td>INVESTIGATION OF PHYSICAL CHANGES OF BIOPOLYMER DRILL-IN FLUID SYSTEMS DURING DRILLING OPERATIONS IN ALASKA</td>
<td>50,000.0</td>
<td>Research/Development</td>
<td>BP Exploration AK Inc</td>
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<td>2009</td>
<td>Phase 2: Conoco: Physical oceanographic measurements in the Klondike and Burger prospects of the Chukchi Sea</td>
<td>73,417.0</td>
<td>Research/Development</td>
<td>Conoco</td>
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<tr>
<td>2009</td>
<td>Scientific Exploration in the Arctic Ocean Workshop</td>
<td>50,000.0</td>
<td>Other Sponsored Activity</td>
<td>Shell Oil Company</td>
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<tr>
<td>2009</td>
<td>Shell - Application of High-Frequency Radar to Potential Hydrocarbon Development Areas in the Northeast Chukchi Sea</td>
<td>300,000.0</td>
<td>Research/Development</td>
<td>Shell International Exploration and Production Inc.</td>
</tr>
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<td>2009</td>
<td>Conoco - Application of High-Frequency Radar to Potential Hydrocarbon Development Areas in the Northeast Chukchi Sea</td>
<td>400,000.0</td>
<td>Research/Development</td>
<td>ConocoPhilips</td>
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<tr>
<td>2009</td>
<td>The Geochronology and the Historical Changes in Trace Metals and Isotopes of Carbon and Nitrogen in Sediments of Chukchi Sea, Arctic Alaska</td>
<td>54,286.0</td>
<td>Research/Development</td>
<td>Conoco</td>
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<td>2009</td>
<td>Monitoring Changes in the Arctic Ocean: A Collaborative Study</td>
<td>175,000.0</td>
<td>Research/Development</td>
<td>Shell Oil Company</td>
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<tr>
<td>2009</td>
<td>Monitoring Pad Pore-Water Flow on the Crude Oil Topping Unit</td>
<td>40,000.0</td>
<td>Research/Development</td>
<td>BP Exploration AK Inc</td>
</tr>
<tr>
<td>Year</td>
<td>Description</td>
<td>Funding</td>
<td>Type of Research/Development</td>
<td>Responsible Party</td>
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<tr>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
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<td>2010</td>
<td>Characterization and Quantification of the Methane Hydrate Resource Potential associated with the Barrow Gas Fields (Phase II)</td>
<td>150,000.0</td>
<td>Research/Development</td>
<td>Petrotechnical Resources Alaska</td>
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<td>2010</td>
<td>Subaward: Alaska North Slope Oil and Gas Transportation Support System</td>
<td>689,501.0</td>
<td>Research/Development</td>
<td>GW Scientific</td>
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<td>2010</td>
<td>Environmental Studies of Port Valdez, Alaska ? 2010</td>
<td>220,331.0</td>
<td>Research/Development</td>
<td>Alyeska Pipeline Service Co.</td>
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<td>2010</td>
<td>DOE/EPPR Strategic Planning, Coordination, and Execution of Activities in Oil and Gas Mandate</td>
<td>90,896.0</td>
<td>Other Sponsored Activity</td>
<td>Battelle Pacific Northwest Lab</td>
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<td>2011</td>
<td>Population assessment of snow crab, Chionoecetes opilio, in the Chukchi and Beaufort Seas including oil and gas lease areas</td>
<td>116,571.0</td>
<td>Research/Development</td>
<td>Coastal Marine Institute</td>
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<td>2011</td>
<td>Monitoring Seabirds and Marine Mammals in the Chukchi Sea as Part of the Alaska Monitoring and Assessment Program</td>
<td>111,947.0</td>
<td>Research/Development</td>
<td>Shell Oil Company</td>
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<td>2011</td>
<td>OSRI Graduate Research Fellowship: Cultural dimensions of community response preparation and vulnerability to Copper River fisheries and the community of Cordova</td>
<td>49,937.0</td>
<td>Research/Development</td>
<td>Oil Spill Recovery Institute</td>
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<td>2011</td>
<td>Environmental Studies of Port Valdez, Alaska 2011</td>
<td>212,730.0</td>
<td>Research/Development</td>
<td>Alyeska Pipeline Service Co.</td>
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<td>2011</td>
<td>Pad Pore Water Movement Through North Slope Gravel Pads</td>
<td>120,000.0</td>
<td>Research/Development</td>
<td>BP Exploration AK Inc</td>
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<td>2012</td>
<td>Data rescue: Epibenthic invertebrates from the Beaufort Sea sampled during WEBSEC and OCS cruises in the 1970s</td>
<td>49,984.0</td>
<td>Research/Development</td>
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<td>2012</td>
<td>Environmental Studies of Port Valdez, 2012</td>
<td>201,266.0</td>
<td>Research/Development</td>
<td>Alyeska Pipeline Service Co.</td>
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<td>2012</td>
<td>Coastal zooplankton communities of the Chukchi Sea</td>
<td>85,278.0</td>
<td>Research/Development</td>
<td>Shell International Exploration and Production Inc.</td>
</tr>
</tbody>
</table>
ACRONYMS

Degree Level --Degree level is determined by the primary degree that the student is working towards within the organization being reported.

- AAS - Associate of Applied Science degree (2-year)
- AS – Associates of Science degree
- BBA – Bachelor of Business Administration degree
- BA - Bachelor of Arts degree
- BEM – Bachelor of Emergency Management
- BI – Bachelor’s Intended (means that a student intends to enroll in bachelor’s degree program, but has not yet met the admission qualifications to do so)
- BS -Bachelor of Science degree
- BT – Bachelor of Technology degree
- CT1 - Certificate (one year certificate program)
- CT2 – Certificate (two year certificate program)
- GCRT – Graduate Certificate
- MA – Master of Arts
- MCE – Master of Civil Engineering
- MEE – Master of Electrical Engineering
- MO – Master, other
- MNRMG – Masters of Natural Resource Management Geography
- MPH – Master Public Health
- MS – Master of Science
- OEC – Occupational Endorsement Certificate
- PHD – Doctor of Philosophy

Selected terms:

Career Clusters: groupings of occupations/career specialties used as an organizing tool for curriculum design and instruction. Career clusters “represent a distinct grouping of occupations and industries based on the knowledge and skills they require”. - See more at: www.careertech.org/career-clusters/glance/careerclusters.html#sthash.B5ALcWAz.dpuf

Continuing Education Units (CEU): This type of non-credit course focuses on community outreach. Courses are designated by a course approval code and typically have a course number ranging between 001 and 049. Source: UA datacookbook

Dual Enrollment: Dual enrollment includes all students who are still in high school, not enrolled in a Tech-Prep program at their high school and taking courses at the University of Alaska. Those students are in the [14-18] age bracket and the courses that they enrolled in are GPA eligible. Source: UA datacookbook

GER: General Education Requirement, the courses that are required for any undergraduate degree.

MAU: Major Administrative Unit: the MAUs are UA Anchorage, UA Fairbanks, UA Southeast and Statewide.