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

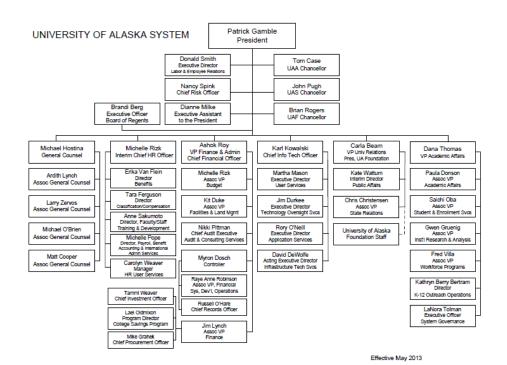
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UNIVERSITY OF ALASKA (UA) OVERVIEW

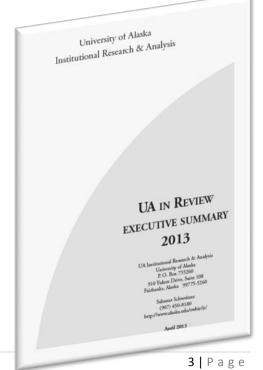
Organizational Charts

<u>www.alaska.edu/OrgCharts/</u> 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, HIth & 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 HIth 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 **BA**, Biology **BA**, Chemistry **BA**, Earth Science **BA**, Mathematics **BA**, Physics **BA**, Pre-major Biology BI, Premajor - Anthropology **BI**, Premajor - Applied Physics **BI, Premajor - Biological Sciences** BI, Premajor - Chemistry BI, Premajor - Civil Engineering **BI**, Premajor - Computer Engineer BI, Premajor - Earth Science BI, Premajor - Electrical Engineer BI, Premajor - General Science BI, Premajor - Geography BI, Premajor - Geological Engineer **BI**, Premajor - Mathematics BI, Premajor - Mechanical Engineer **BI**, Premajor - Physics BI, Premajor - Wildlife Biology BS, Anthropology **BS**, Applied Physics **BS**, Biological Sciences BS, Biology BS, Chemistry BS, Civil Engineering BS, Electrical Engineering **BS**, Engineering BS, Engineering Non-Major BS, General Science BS, Geological Engineering **BS**, Geomatics BS, Math & Science Non-Major BS, Mathematics BS, Mech/Elect Engr Consortium BS, Mechanical Engineering **BS**, Natural Sciences **BS**, Physics BS, Pre-Major Biology BS, Pre-Major Civil Engineering BS, Pre-major Engineering BS, Pre-Major Technology **BS**, Statistics BS, Technology BT, Technology CT1, Civic Engagement CT1, Geographic Information Sys CT1, Pre-major Engineering GCRT, Earthquake Engineering GCRT, Statistics MA, Anthropology MA, Chemistry

MCE, Civil Engineering MEE, Electrical Engineering MS, Arctic Engineering MS, Atmospheric Sciences MS, Biochemistry/Molecular Biology **MS**, Biological Sciences MS, Biology MS, Botany MS, Chemistry MS, Civil Engineering **MS**, Computational Physics MS, Electrical Engineering MS, Engineering Management MS, Geological Engineering MS, Geophysics MS. Mathematics MS, Mechanical Engineering MS, Physics MS, Science Management **MS**, Space Physics MS, Statistics PHD, Anthropology PHD, Atmospheric Sciences PHD, Biochemistry/Molecular Biology PHD, Biological Sciences PHD, Engineering PHD, Geophysics PHD, Mathematics PHD, Physics PHD, Space Physics

TRANSPORTATION, DISTRIBUTION, AND LOGISTICS

AAS, Air Traffic Control AAS, Automotive Technology AAS, Aviation Administration AAS, Aviation Maint Technology AAS, Aviation Maintenance AAS, Heavy Duty Trans & Equip AAS, Logistics & Supply Chain Ops AAS, Logistics Operations AAS, Professional Piloting BBA, Global Log Supply Chain Mgt BBA, Global Logistics Mgmt BS, Aviation Technology CT1, Logistics CT1, Logistics & Supply Chain Ops CT2, Airframe CT2, Airframe and Powerplant CT2, Automotive Technology CT2, Aviation Maint - Airframe CT2, Aviation Maint - Powerplant

CT2, Aviation Maint Technology CT2, Diesel/Heavy Equipment CT2, Ground Vehicle Maint Tech CT2, Heavy Duty Trans & Equip GCRT, Port & Coastal Engineering GCRT, Supply Chain Management MS, Global Supply Chain Mgmt OEC, Automotive Technology OEC, Brakes, Suspension, Align OEC, Diesel/Heavy Duty OEC, Diesel/Marine OEC, Engine Performance OEC, Logistics OEC, Logistics & Supply Chain Ops OEC, Marine Engine Room Prep

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.

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

- 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.

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:
 - o <u>www.ctc.uaf.edu/programs/emergency/</u>
 - o <u>www.uaa.alaska.edu/alliedhealth/academics/fire.cfm</u>
- Marine Technology, Port and Coastal Engineering
 - o <u>www.uas.alaska.edu/career_ed/maritime/</u>
 - o www.uaa.alaska.edu/pathways/upload/Civil-Grad-MS-MCE.pdf
- Arctic and Petroleum Engineering, Geoscientists, Arctic Exploration, for example:
 - o Department of Petroleum Engineering: <u>http://cem.uaf.edu/pete</u>
 - o Civil Engineering Program (Arctic Engineering) http://cem.uaf.edu/cee/degrees.aspx
 - o Geoscience
 - <u>http://www.uaf.edu/geology/</u>
 - 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.

<u>Up to 38 credits</u> can be transcripted for approved apprenticeship programs.

Graduates can seamlessly enroll in the <u>Bachelor of Science, Technology</u> (UAA) or <u>Bachelor of Technology</u> (UAF) degree. See more at: <u>www.uaa.alaska.edu/cte/academics/apprenticeship/index.cfm#sthash.WBQfZOOl.dpuf</u>

UAF – CTC APPRENTICESHIP TECHNOLOGIES <u>WWW.CTC.UAF.EDU/PROGRAMS/APT/</u>

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:<u>rfweggel@alaska.edu</u>

UAS WWW.UAS.ALASKA.EDU/ACADEMICS/UNDERGRAD/ASSOC/AAS/APPRENTICESHIP_TECH.HTML

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 <u>Career Education</u> 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. <u>www.careertech.org/career-clusters/</u>

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

University of Alaska Career Clusters	NASDCTEc Clusters (aka DOL Cluster)		O'NET Career Clusters
Fisheries, Agriculture, &	Agriculture, Food and Natural Resource	—	Agriculture, Food and
Natural Resources	Science, Technology, Engineering and		National Resources
	Mathematics	—	Architecture & Construction
	Government and Public Administration	—	Arts, AV Technology, and
Energy, Environmental	Science, Technology, Engineering and		Communications
Science, & Green Jobs	Mathematics	—	Business, Management, and
	Agriculture, Food and Natural Resource		Administration
	Transportation, Distribution, and Logistics	—	Education and Training
	Architecture and Construction	—	Finance
	Manufacturing	—	Government and Public
Architecture & Construction	Architecture and Construction		Administration
	Manufacturing	—	Health Science
	Transportation, Distribution and Logistics	—	Hospitality and Tourism
	Science, Technology, Engineering and	—	Human Services
	Mathematics	—	Information Technology
Arts, AV Technology, &	Arts, Audio/Video Technology and	- 1	Law, Public Safety,
Communications	Communications		Corrections and Security
	Education and Training Cluster	-	Manufacturing

	Business, Management and Administration	 Marketing, Sales and Service Science, Technology,
Business, Management, & Administration	Business, Management and Administration Marketing Sales and Service Finance	Engineering, and Mathematics – Transportation, Distribution, and Logistics
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	

EMPLOYMENT AFTER GRADUATION

Number of Students Graduated 2007-2011 by Oil and Gas Clusters					
	2007	2008	2009	2010	2011
Architecture and Construction	111	113	102	156	143
Energy, Environmental Science, and Green Jobs	20	26	19	17	24
Fisheries, Agriculture, and Natural Resources	65	71	74	73	68
Health Sciences	409	436	400	485	476
Law, Public Safety, and Security	19	23	15	12	29
Mining, Manufacturing, & Process Technology	99	106	112	118	132
Science, Technology, Engineering, and Research	325	332	371	411	421
Transportation, Distribution and Logistics	168	161	171	144	187
Total	1216	1268	1264	1416	1480

Number of Students Graduated 2007-2011 Who Were Employed One Year After Exit					
	2007	2008	2009	2010	2011
Architecture and Construction	86	93	64	111	106
Energy, Environmental Science, and Green Jobs	16	23	14	12	17
Fisheries, Agriculture, and Natural Resources	46	45	47	42	54
Health Sciences	350	371	346	412	384
Law, Public Safety, and Security	16	21	14	10	27
Mining, Manufacturing, & Process Technology	85	81	93	105	99
Science, Technology, Engineering, and Research	225	229	266	311	278
Transportation, Distribution and Logistics	110	113	120	105	136
Total	934	976	964	1108	1101

RESEARCH AND OTHER SPONSORED PROGRAMS

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

	UA Grants Related to Oil and Gas Industry						
FY	Grant Title	Max Fund Amount	· · · · · · · · · · · · · · · · · · ·	Agency			
2008	North Slope Arctic Fox Diagnostic and Research	14,040.0	Research/Development	BP Exploration AK Inc			
	Initiative: Health Status and Zoonotic Diseases						
	Oil Spill Recovery Graduate Fellowship for James Alanko	50,033.0	Research/Development	Prince William Sound Science Center			
2008	Environmental Studies of Port Valdez, Alaska - 2008	216,274.0	Research/Development	Alyeska Pipeline Service Co.			
	Experimental Study on Bending Behavior of Natural Gas Pipeline at the Boundary of Permafrost and Non- permafrost: Planning a Field Experiment for West Siberia	6,997.3	Research/Development	Hokkaido University			
2008	Physical oceanographic measurements in the Klondike and Burger prospects of the Chukchi Sea	90,217.0	Research/Development	Conoco			
2008	Conoco-LAB : Assessment of the planktonic communities in the Klondike and Burger prospect regions of the Chukchi Sea	6,075.0	Research/Development	Conoco			
2008	ConocoPhilips 2008 Environmental Studies Program in Chukchi Sea: Benthic Ecology	33,000.0	Research/Development	Conoco			
2009	Oil in Ice: Transport, Fax, and Potential Exposure	63,156.0	Research/Development	Oil Spill Recovery Institute			
2009	Environmental Studies of Port Valdez, Alaska - 2009	225,646.0	Research/Development	Alyeska Pipeline Service Co.			
2009	Schrader Bluff Enhanced Oil Recovery	332,000.0	Research/Development	BP Exploration AK Inc			
2009	ConocoPhilips 2008 Environmental Studies Program in Chukchi Sea: Benthic Ecology团	299,782.0	Research/Development	Conoco			
2009	Phase 2: Conoco: Assessment of the planktonic communities in the Klondike and Burger prospect regions of the Chukchi Sea	117,546.0	Research/Development	Conoco			
2009	ISER Energy Related Programs	300,000.0	Research/Development	President's Special Projects			
	UAF Phased Research Proposal to Evaluate the Effects of Dispersed Oil on Cold Water Environments Of the Beaufort and Chukchi Seas	197,000.0		NewFields			
2009	INVESTIGATION OF PHYSICAL CHANGES OF BIOPOLYMER DRILL-IN FLUID SYSTEMS DURING DRILLING OPERATIONS IN ALASKA	50,000.0	Research/Development	BP Exploration AK Inc			
2009	Phase 2: Conoco: Physical oceanographic measurements in the Klondike and Burger prospects of the Chukchi Sea	73,417.0	Research/Development	Conoco			
2009	Scientific Exploration in the Arctic Ocean Workshop	50,000.0	Other Sponsored Activity	Shell Oil Company			
2009	Shell - Application of High-Frequency Radar to Potential Hydrocarbon Development Areas in the Northeast Chukchi Sea	300,000.0	Research/Development	Shell International Exploration and Production Inc.			
2009	Conoco - Application of High-Frequency Radar to Potential Hydrocarbon Development Areas in the Northeast Chukchi Sea	400,000.0	Research/Development	ConocoPhillips			
2009	The Geochronology and the Historical Changes in Trace Metals and isotopes of Carbon and Nitrogen in Sediments of Chukchi Sea, Arctic Alaska	54,286.0	Research/Development	Conoco			
2009	Monitoring Changes in the Arctic Ocean: A Collaborative Study	175,000.0	Research/Development	Shell Oil Company			
2009	Monitoring Pad Pore-Water Flow on the Crude Oil Topping Unit	40,000.0	Research/Development	BP Exploration AK Inc			

2010 Characterization and Quantification of the Methane Hydrate Resource Potential associated with the Barrow Gas Fields (Phase II)	150,000.0	Research/Development	Petrotechnical Resources Alaska
2010 Subaward: Alaska North Slope Oil and Gas Transportation Support System	689,501.0	Research/Development	GW Scientific
2010 Environmental Studies of Port Valdez, Alaska ? 2010	220,331.0	Research/Development	Alyeska Pipeline Service Co.
2010 DOE/EPPR Strategic Planning, Coordination, and Execution of Activities in Oil and Gas Mandate	90,896.0	Other Sponsored Activity	Battelle Pacific Northwest Lab
2011 Population assessment of snow crab, Chionoecetes opilio, in the Chukchi and Beaufort Seas including oil and gas lease areas	116,571.0	Research/Development	Coastal Marine Institute
2011 Monitoring Seabirds and Marine Mammals in the Chukchi Sea as Part of the Alaska Monitoring and Assessment Program	111,947.0	Research/Development	Shell Oil Company
2011 OSRI Graduate Research Fellowship: Cultural dimensions of community response preparation and vulnerability to Copper River fisheries and the communityof Cordova	49,937.0		Oil Spill Recovery Institute
2011 Environmental Studies of Port Valdez, Alaska 2011	212,730.0	Research/Development	Alyeska Pipeline Service Co.
2011 Pad Pore Water Movement Through North Slope Gravel Pads	120,000.0	Research/Development	BP Exploration AK Inc
2012 Data rescue: Epibenthic invertebrates from the Beaufort Sea sampled during WEBSEC and OCS cruises in the 1970s	49,984.0	Research/Development	Oil Spill Recovery Institute
2012 Environmental Studies of Port Valdez, 2012	201,266.0	Research/Development	Alyeska Pipeline Service Co.
2012 Zooplankton communities of the Beaufort Shelf 2011	119,691.0	Research/Development	Shell International Exploration and Production Inc.
2012 Coastal zooplankton communities of the Chukchi Sea	85,278.0	Research/Development	Shell International Exploration and Production Inc.

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

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.

O'NET: The nation's primary source of occupational information. See <u>http://www.onetcenter.org/overview.html</u> for more information.