

High School Name:
Community College Name:
CTE Program of Study Name:
Date:

Portland Community College
Bioscience Technology
12/1/2016

Health Sciences Cluster

2016

Skills-to-Course Matrix

Instructions: 1) Enter your high school name above. 2) Enter the community college name. 3) Enter the Program of Study name. 4) Enter the date. 5) Click on Course 1, Course 2, etc. below and replace with your POS course names (or numbers). 6) Check those courses that trigger the TSA for this POS. 7) Finally, check those standards that are taught with intent and purpose, and are assessed in each course. Note: You only need to use the optional Focus Area tabs below if you are using those skill sets for multiple options in a Program of Study or if you want to use another set of industry validated standards.

Cluster Knowledge and Skills (CTE standards)

CCTC	Code Number	KS Statement	BIT 102 TSA?	BIT 105 TSA?	BIT 107 TSA?	BIT 109 TSA?	BIT 125 TSA?	BIT 126 TSA?	BIT 181 TSA?
HL 1	HL01	Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.	X	X	X				X
HL 2	HL02	Explain the healthcare worker's role within their department, their organization, and the overall healthcare system.			X			X	X
HL 3	HL03	Identify existing and potential hazards to clients, co-workers, visitors, and self in the healthcare workplace.							
HL 4	HL04	Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care.	X						
HL 5	HL05	Analyze the legal and ethical responsibilities, limitations and implications of actions within the healthcare workplace.	X						
HL 6	HL06	Evaluate accepted ethical practices with respect to cultural, social and ethnic differences within the healthcare workplace.							

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Biotechnology, Research & Development Focus Area

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Focus Area Knowledge and Skills (CTE standards)

CCTC	Code Number	KS Statement	BIT 102	BIT 105	BIT 107	BIT 109	BIT 125	BIT 126	BIT 185
			TSA?	TSA?	TSA?	TSA?	TSA?	TSA?	
HL-BRD 1	HLBR01	Summarize the goals of biotechnology research and development within legal and ethical protocols.	X	X	X	X	X	X	
HL-BRD 2	HLBR02	Apply the fundamentals of biochemistry, cell biology, genetics, mathematical concepts, microbiology, molecular biology, organic chemistry and statistics to conduct effective biotechnology research and development of products.	X	X	X	X	X		
HL-BRD 3	HLBR03	Demonstrate basic knowledge of recombinant DNA, genetic engineering, bioprocessing, monoclonal antibody production, nanotechnology, bioinformatics, genomics, proteomics and transcriptomics to conduct biotechnology research and development.	X						
HL-BRD 4	HLBR04	Demonstrate the principles of solution preparation, sterile techniques, contamination control, and measurement and calibration of instruments used in biotechnology research.		X					
HL-BRD 5	HLBR05	Determine processes for product design and production and how that work contributes to an understanding of the biotechnology product development process.	X						
HL-BRD 6	HLBR06	Summarize and explain the larger ethical, moral and legal issues related to biotechnology research, product development and use in society.	X						

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Health Diagnostics **Focus Area**

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Focus Area Knowledge and Skills (CTE standards)

CCTC	Code Number	KS Statement	BIT 102	BIT 105	BIT 107	BIT 109	BIT 125	BIT 126	BIT 185
			TSA?	TSA?	TSA?	TSA?	TSA?	TSA?	
HL-DIA 1	HLDG01	Communicate key diagnostic information to healthcare workers and patients in an accurate and timely manner.							
HL-DIA 2	HLDG02	Assess and report patient's/client's health status in order to monitor and document patient progress.							
HL-DIA 3	HLDG03	Demonstrate the principles of body mechanics for positioning, transferring and transporting of patients/clients, and perform them without injury to the patient/client or self.							
HL-DIA 4	HLDG04	Explain procedures and goals to the patient/client accurately and effectively, using strategies to respond to questions and concerns.							
HL-DIA 5	HLDG05	Select, demonstrate and interpret diagnostic procedures.							

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Health Informatics **Focus Area**

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Focus Area Knowledge and Skills (CTE standards)

CCTC	Code Number	KS Statement	BIT 102	BIT 105	BIT 107	BIT 109	BIT 125	BIT 126	BIT 185
			TSA?	TSA?	TSA?	TSA?	TSA?	TSA?	
HL-HI 1	HLIF01	Communicate health information accurately and within legal and regulatory guidelines, upholding the strictest standards of confidentiality.							
HL-HI 2	HLIF02	Describe the content and diverse uses of health information.							
HL-HI 3	HLIF03	Demonstrate the use of systems used to capture, retrieve and maintain confidential health information from internal and external sources.							

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Support Services Focus Area

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Focus Area Knowledge and Skills (CTE standards)

CCTC	Code Number	KS Statement	BIT 102 TSA?	BIT 105 TSA?	BIT 107 TSA?	BIT 109 TSA?	BIT 125 TSA?	BIT 126 TSA?	BIT 185
HL-SUP 1	HLSS01	Describe, differentiate and safely perform the responsibilities of healthcare support services roles.							
HL-SUP 2	HLSS02	Demonstrate work practices that maintain a clean and healthy healthcare facility to reduce or eliminate pathogenic organisms.							
HL-SUP 3	HLSS03	Follow established internal and external guidelines in order to provide high-quality, effective support services in the healthcare facility.							
HL-SUP 4	HLSS04	Maximize available resources for proper care and use of healthcare equipment and materials.							
HL-SUP 5	HLSS05	Implement healthcare facility standards in order to maintain high-quality healthcare facilities.							

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Therapeutic Services **Focus Area**

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Focus Area Knowledge and Skills (CTE standards)

CCTC	Code Number	KS Statement	BIT 102 TSA?	BIT 105 TSA?	BIT 107 TSA?	BIT 109 TSA?	BIT 125 TSA?	BIT 126 TSA?	BIT 185
HL-THR 1	HLTS01	Utilize communication strategies to answer patient/client questions and concerns on planned procedures and goals.							
HL-THR 2	HLTS02	Communicate patient/client information among healthcare team members to facilitate a team approach to patient care.							
HL-THR 3	HLTS03	Utilize processes for assessing, monitoring and reporting patient's/clients' health status to the treatment team within protocol and scope of practice.							
HL-THR 4	HLTS04	Evaluate patient/client needs, strengths and problems in order to determine if treatment goals are being met.							