

Career and Technical Education Adapted CTE Course Blueprint of Essential Standards

Health Science Education

HB12 Biomedical Technology II

Public Schools of North Carolina
State Board of Education • Department of Public Instruction
Academic Services and Instructional Support
Division of Career and Technical Education
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Special thanks to the following educators who developed this Adapted CTE Course Blueprint.

Name – LEA or Organization

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This Adapted CTE Course Blueprint has been reviewed by business and industry representatives for technical content and appropriateness for the industry.

**Adapted CTE Course Blueprint of Essential Standards for
HB12 Biomedical Technology II**
(Recommended hours of instruction: 135-180)

Essential Std #	Units, Essential Standards, and Indicators (The Learner will be able to:)	Course Weight	RBT Designation
1	2	3	4
	Total Course Weight	100%	
A	UNDERSTAND BIOETHICS, USE OF TECHNOLOGY, AND HUMAN GENETIC VARIATION	50%	
BMTI 01.00	Exploring Bioethics	18	
	<ul style="list-style-type: none"> 1.01 Bioethics Concepts 1.02 Balancing Individual and Community Claims 1.03 Organ Transplantation 1.04 Genetic Testing 1.05 Human Experimentation 		
BMTI 02.00	Using Technology to Study Cellular and Molecular Biology	15	
	<ul style="list-style-type: none"> 2.01 What is technology? 2.02 Resolving Issues 2.03 Putting Technology to Work 2.04 Technology: How Much is Enough? 		
BMTI 03.00	Human Genetic Variation	17	
	<ul style="list-style-type: none"> 3.01 Alike, But Not the Same 3.02 The Meaning of Genetic Variation 3.03 Molecular Medicine Comes of Age 3.04 Are You Susceptible? 3.05 Making Decisions in the Face of Uncertainty 		
B	UNDERSTAND NEUROBIOLOGY, BIOLOGICAL RHYTHMS, AND EVOLUTION AND MEDICINE	50%	
BMTI 04.00	Understand the Brain: Understanding Neurobiology Through the Study of Addiction	17	
	<ul style="list-style-type: none"> 4.01 The Brain: What's Going on in There? 4.02 Neurons, Brain Chemistry, and Neurotransmission 4.03 Drugs Change the Way Neurons Communicate 4.04 Drug Abuse and Addiction 4.05 Drug Addiction is a Disease, So What Do We Do About It? 		
BMTI 05.00	Understand Sleep, Sleep Disorders, and Biological Rhythms	15	
	<ul style="list-style-type: none"> 5.01 Introduction 5.02 Misconceptions About Sleep 5.03 Major Concepts Related to the Biology of Sleep 5.04 Sleep Disorders 		
BMTI 06.00	Understand Evolution and Medicine	18	
	<ul style="list-style-type: none"> 6.01 Information about Evolution and Medicine 6.02 Investigating Lactose Intolerance and Evolution 6.03 Evolutionary Process and Patterns Inform Medicine 6.04 Using Evolution to Understand Influenza 6.05 Evaluating Evolutionary Explanations 		