UR East Overview of Year 11th/12th Grade Vision Care II Curriculum

SEPT	ОСТ	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE
Unit 1 Ophthaln Fabricatio		Unit 2 Lenses and Frai	mes	Unit 3		Uni Multifoca			it 5 ensing

Unit 1- Ophthalmic Fabrication	Understanding	Essential Question
 Mission/Vision alignment Tenacious: Recognizes and takes advantage of opportunities to discover passions Think Purposeful: Thinks creatively to solve problems, make decisions, and take action Advocate: Accepts differences and listens to the voice of others CDOS Standards (Career Development and Occupational Studies): 1, 2, 3a, and 3b 	 Enduring Understandings Scholars will understand that 1. There are different ophthalmic profession choices that are open to me after this program 2. Glasses correct for different types of astigmatism, and that myopia and hyperopia are the 2 types of visual disorders that people experience 3. Each step of the fabrication of glasses must be completed accurately 4. Using the lensometer is accurately is important to ensure the patients prescription is accurate 5. The mathematical determination of decentration is necessary to accurately place the optical center of the lens in front of a patients pupil 6. How the tracer and edger work together to accurately cut the shape of the lens, and what to do to determine errors in size 7. How to use ANSI standards to determine whether a prescription is accurate for the patient and the prescription 	Essential Questions Scholars will consider such questions as 1. What can I do after this class? 2. How do I make a pair of glasses? 3. Why do I need to know the difference between spherical and cylindrical lines in the lensometer? 4. How do glasses help to correct my vision? 5. Why do I need to block lenses at the correct decentration? 6. How does the tracer help me to make glasses? 7. Why are ANSI standards?

UR East Overview of Year Vision Care II Curriculum

11th/**12**th Grade

Performance Task: Scholars will be given a finished pair of glasses and a patient work ticket. They will use the work ticket, and ANSI standards, to determine if the prescription is accurate for the patient, what went wrong in the manufacture process, and produce a pair that is accurate for the patient.

2. Scholars will find and interview an optician (10 - 15 minute interview) where they will ask questions regarding how the optician got into the job, what they like, what they find difficult, as well as other pertinent questions. Scholars will write a short report about the interview and will present it to the class.

UR East Overview of Year 11th/12th Grade Vision Care II Curriculum

Unit 2-	Understanding	Essential Question
Lenses and frames		
 Mission/Vision alignment Tenacious: Learns from mistakes; picks up and keeps going Think Purposeful: Produces work that meets college and work place standards Advocate: Speaks confidently and is willing to respectfully voice opinions to advocate for self or others CDOS Standards (Career Development and Occupational Studies): 2, 3a, and 3b CCTC Standards (Common Career Technical Core) 2, 4, 8, 9, 11 	Enduring Understand that 1. Lenses come in a variety of materials and should be picked based on the customer needs. 2. Different types of lenses have different requirements for handling as they are manufactured. 3. Different types of frames are mounted and manufactured differently	Essential Questions Scholars will consider such questions as 1. What are the different types of lenses I could use to make a pair of glasses? 2. What are the different types of frames patients might want to use? 3. Why are there different ways to care for the types of lenses and frames? 4. How do I treat different types of materials differently in the production line? 5. How do I mount lenses in semi-rimless frames? 6. How do I repair different types of frames?

Performance Task:

Scholars will correctly trace, cut, and mount semi-rimless polycarbonate lenses into a frame for a patient such that they do not crack the lenses or breaking the mounting wire.

Formative Assessments:

UR East Overview of Year 11th/12th Grade Vision Care II Curriculum

Unit 3-	Understanding	Essential Question
Clinic Procedures		
Mission/Vision alignment Tenacious: Uses feedback to refine thinking or actions Think Purposeful: Uses foundational knowledge and essential literacies to develop deeper understandings Advocate: Leads by example CDOS Standards (Corporate)	 Enduring Understandings Scholars will understand that Customer service is a universal component of all service jobs and industries and have several important components Specific machines are used to determine important measurements for the doctor to determine patients eye health The work ticket must be accurately filled out in order to accurately manufacture a pair of glasses for a 	Essential Questions Scholars will consider such questions as 1. What is the best way to talk to a patient? 2. What patient measurements do I need to take for the doctor and for making glasses? 3. What machines do I use as I prepare the patient to see the eye doctor? 4. How do I maintain a patients medical records
CDOS Standards (Career Development and Occupational	patient 4. Patient records are accurately recorded and	records
Studies): 1, 2, 3a, and 3b	maintained in the database 5. Professional standards are an important aspect of behavior – ethics and HIPPA rules	
CCTC Standards (Common Career Technical Core) 1, 2, 4, 8, 9, 11		

Performance Tasks:

The scholar will demonstrate the accurate use of all machinery for pre-screening a patient, working to develop a patient/optician rapport, and will be able to utilize these skills during patient screenings with local volunteer eye doctors present

Formative Assessments:

UR East Overview of Year 11th/12th Grade Vision Care II Curriculum

Unit 4-	Understanding	Essential Question
Multifocal Lenses		
 Mission/Vision alignment Tenacious: Take risks in order to learn and grow Think Purposeful: Critically questions to refine and or extend understanding Advocate: Accepts differences and listens to the voice of others CDOS Standards (Career Development and Occupational Studies): 1, 2, 3a, and 3b 	 Enduring Understandings Scholars will understand that How multifocal lenses differ from single vision lenses and the different uses of each The techniques for manufacturing multifocal lenses and how they differ from those necessary for manufacturing single vision lenses The digital lens system is a lens molding system where the prescription is loaded into the machine and glass lenses are used to hold a glass monomer to make a lens that is not "stock." 	 Essential Questions Scholars will consider such questions as 1. How are multifocal lenses different from single vision lenses? 2. How do I measure a patient for a multifocal lens? 3. What are the markings on a progressive lens for? 4. How do I block a multifocal lens? 5. What is the digital lens system? 6. How do I fit the multifocal lens to the patients face?
CCTC Standards (Common Career Technical Core)		
1, 2, 4, 8, 9, 11		

Performance Task:

Scholars will produce a pair of progressive and bifocal lenses for patients using the lens molding system, accurately measuring and fitting them for the lenses, while helping them to pick out frames that fit their facial features.

Formative Assessments:

UR East Overview of Year 11th/12th Grade Vision Care II Curriculum

them of manufactured glasses on patients face them them continuous plan to meet them of manufactured glasses on patients face the patients face when I hand them the patients?	Unit 5-	Understanding	Essential Question
• Tenacious: Defines goals and develops a plan to meet them Scholars will understand that 1. Bench alignment of frames helps to ensure proper fit of manufactured glasses on patients face 2. When dispensing to a patient they must be told when the patient? Scholars will consider such questions as 1. How do I make sure that the lenses for the patients face when I hand them the patient?	Dispensing		
 Think Purposeful: Listens to and seeks out varying perspectives as part of thinking, decision making, and problem solving it is best to use their glasses based on their prescription and how to safely care for them. The rules regarding different face shapes and frames that look best for them How do I know what frames will look good on the patient? How do I tell patients to take care of their glasses? 	 Mission/Vision alignment Tenacious: Defines goals and develops a plan to meet them Think Purposeful: Listens to and seeks out varying perspectives as part of thinking, decision making, and problem solving Advocate: Identifies and utilizes skills to support self and others CDOS Standards (Career Development and Occupational Studies): 1, 2, 3a, and 3b CCTC Standards (Common Career Technical Core) 	 Scholars will understand that Bench alignment of frames helps to ensure proper fit of manufactured glasses on patients face When dispensing to a patient they must be told when it is best to use their glasses based on their prescription and how to safely care for them. The rules regarding different face shapes and frames that look best for them There are specific steps, and tools, to use to fix frames 	 Scholars will consider such questions as How do I make sure that the lenses fit the patients face when I hand them to the patient? How do I know what frames will look good on the patient? How do I tell patients to take care of their glasses? What do I do if the glasses are crooked on the patients face?

Performance Task:

Scholars will demonstrate their mastery of these skills as they work to help a patient pick out frames that are complementary to their face shape and fix frames that are sitting crooked on their face.

UR East Overview of Year Vision Care II Curriculum

11th/12th Grade

Formative Assessments: