

Vision Care Technician II

8398 36 weeks

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Course Description

Suggested Grade Level: 12

Prerequisites: 8397

This certificate program is designed to provide students with the basic skills and knowledge to begin work as an ophthalmic/optometric assistant. The coursework will fulfill the requirements of the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO) and prepare students to take the national examination administered by JCAHPO. Trained, experienced ophthalmic assistants who can demonstrate the right skills and knowledge should be able to pursue many exciting and respected career options or postsecondary study within the ophthalmic industry. Students must complete 1,000 hours of clinical experience, under the supervision of a licensed practitioner within 36 months of expected examination.

Task Essentials Table

- Tasks/competencies designated by plus icons (⊕) in the left-hand column(s) are essential

- Tasks/competencies designated by empty-circle icons (○) are optional
- Tasks/competencies designated by minus icons (⊖) are omitted
- Tasks marked with an asterisk (*) are sensitive.

8398	Tasks/Competencies	
Identifying Injuries, Diseases, and Disorders		
⊕	Identify ocular injuries and emergencies.	
⊕	Identify the signs, symptoms, and treatments of common ocular diseases and disorders.	
⊕	Identify the signs, symptoms, and treatment of systemic conditions.	
Discovering Pharmacology		
⊕	Identify topical medications.	
⊕	Identify key systemic medications.	
⊕	Document prescriptions.	
⊕	Explain various routes for administering pharmaceuticals.	
Exploring Ocular Procedures		
⊕	Assist a doctor with contact lens patients.	
⊕	Assist in the application of contact lenses.	
⊕	Identify staining related to contact lenses.	
⊕	Identify common complications related to contact lenses.	
⊕	Examine the evolution of refractive surgery.	
⊕	Perform specialty tests.	
Exploring Eyeglass Dispensing		
⊕	Apply appropriate measurements and terminology.	
⊕	Identify the components of an eyeglass prescription.	
⊕	Identify various lens types, materials, and treatments.	
⊕	Identify progressive addition lenses (PAL).	
⊕	Demonstrate frame-adjustment techniques.	
⊕	Select frames with patient consultation.	
⊕	Perform a sale.	
⊕	Demonstrate the delivery of eyewear.	
Exploring Professional Choices		
⊕	Describe the process and requirements for obtaining industry certifications related to the Visual Care Technician II course.	
⊕	Identify testing skills and strategies for a certification examination.	
⊕	Demonstrate the ability to successfully complete selected practice examinations (e.g., practice questions similar to those on certification exams).	
Describing the Opioid Crisis		
⊕	Describe the history and current state of the opioid crisis in the United States.	
⊕	Describe the history and current state of the opioid crisis in Virginia.	
⊕	Define the pharmacological components and common uses of opioids.	
Examining the Key Factors of Drug Addiction		
⊕	Examine the science of addiction.	
⊕	Explain prevention and early intervention strategies.	
⊕	Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).	

8398	Tasks/Competencies
+	Describe the treatment models of addiction therapy.
+	Describe the medication management antidote used to prevent fatal opioid overdoses.
Understanding Pain Management Protocols	
+	Explain the science of physiological and mental pain.
+	Describe the diagnostic tools used in developing pain management plans.
+	Describe pain treatment options available to various populations of patients.
+	Describe the effects of opioid dependency on the human body systems.
+	Explain the mechanism and physical effects of opioids on the human body.
+	Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.
+	Describe the withdrawal and tapering side effects of opioid use.
+	Describe storage and disposal options for opioids.
+	Explain community resources for education about opioid use.
Working with Patients and Caregivers	
+	Describe key communication topics involving opioids for patients.
+	Describe communication topics for caregivers and family members.

Legend: + Essential ○ Non-essential ⊖ Omitted

Curriculum Framework

Identifying Injuries, Diseases, and Disorders

Task Number 39

Identify ocular injuries and emergencies.

Definition

Identification should include

- ocular injuries
- foreign bodies
- indications of contusions
- indications of lacerations
- chemical injuries

- first aid actions
- procedures for an emergency.

Process/Skill Questions

- What type of damage can a foreign body cause to an eye?
- What are the American Heart Association procedures for eye injuries?
- What are the first aid procedures for flushing the eyes after chemical exposure?
- How can the SDS assist with treatment after an ocular injury?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
 - Knowledge Test: Human Growth and Development
 - Knowledge Test: Pathophysiology
-

Task Number 40

Identify the signs, symptoms, and treatments of common ocular diseases and disorders.

Definition

Identification should include the signs, symptoms, and treatments of the following:

- Glaucoma
- Cataracts
- Macular degeneration
- Diabetic retinopathy
- Retinal detachment
- Dry eye syndrome
- Keratoconus

Process/Skill Questions

- What is the difference between a sign and a symptom?
- What disorders have similar signs or symptoms?
- What disorders tend to be age-related?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
-

Task Number 41

Identify the signs, symptoms, and treatment of systemic conditions.

Definition

Identification should include

- diabetes
- the effects of herpes on the eye
- the effects of shingles on the eye
- the effects of autoimmune diseases on the eye
- the effects of HIV on the eye
- the effects of MS on the eye
- the effects of a thyroid disorder on the eye
- the effects of hypertension on the eye
- the effects of high cholesterol on the eye
- allergies
- endocrine changes.

Process/Skill Questions

- What are the chronic effects of shingles on the eye?
- How does diabetes affect visual acuity?
- What visual appearances of the eye lead to the diagnosis of thyroid conditions?
- What does “systemic” mean?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Human Growth and Development

- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl
-

Discovering Pharmacology

Task Number 42

Identify topical medications.

Definition

Identification should include

- matching the color of a top with the name and purpose of a medication
- applying the appropriate medication to a given situation based on tolerance, toxicity, stability, penetration, and sterility requirements
- identifying the effects and duration of medications.

Process/Skill Questions

- What are the five rights for administering medication?
- What types of medication cannot be used together?
- What is the proper order for the application of topical medications?
- When should a medication be discarded?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Specialty

Task Number 43

Identify key systemic medications.

Definition

Identification should include

- medications that adversely affect the eye
- how systemic medications affect the eye
- adverse effects of recreational drugs to the eye.

Process/Skill Questions

- What affect do antihistamines have on the eye?
- What affect does chronic recreational drug use have on the eye?
- Can medications cause loss of vision? Why, or why not?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Specialty
-

Task Number 44

Document prescriptions.

Definition

Documentation should include the following procedures, under the direct supervision of a doctor:

- Preparing prescriptions for doctor approval

- Reading prescriptions
- Refilling prescriptions
- Calling in or electronically submitting prescriptions to a pharmacy
- Recording prescriptions on a patient's chart
- Dispensing appropriate samples

Process/Skill Questions

- What information is necessary for writing a prescription?
- What is a Drug Enforcement Administration (DEA) number?
- Who can approve the release of a prescription?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Specialty
-

Task Number 45

Explain various routes for administering pharmaceuticals.

Definition

Explanation should include

- listing alternative routes of medication
- explaining the use of various injections, including the purpose of each and situation for when each may be considered
- identifying signs of complications and side effects of locally administered drugs.

Process/Skill Questions

- What route delivers medication to the bloodstream immediately?
- What types of injection are used on the eye?
- What is the most common route of ocular medication administration?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Specialty

Exploring Ocular Procedures

Task Number 46

Assist a doctor with contact lens patients.

Definition

Assistance should include

- explaining the optical correction of ametropia with contact lenses
- using appropriate terminology related to contact lenses
- identifying the parameters of soft and rigid contact lenses (i.e., power, base curve, diameter)
- identifying types of contact lenses
- relating the correct protocol for care and wear of contact lens (e.g., contact lens solutions, care procedures, wearing schedules, follow-up schedules)
- describing the uses of contact lens solutions
- differentiating between a prescription for eyeglasses and a prescription for contact lenses
- describing the instruments used for the verification of contact lens parameters
- describing the instruments used in the evaluation and fitting of contact lenses.

Process/Skill Questions

- How long is a contact lens prescription valid?
- What is the difference between soft and rigid contact lenses? How do you identify the difference?

- What do you give a patient once you have completed insertion and removal (I&R) training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Specialty
-

Task Number 47

Assist in the application of contact lenses.

Definition

Assistance should include

- identifying the instruments used for the verification of lens parameters
- identifying the instruments used in the evaluation and fitting of contact lenses
- initiating accurate records, according to office procedures
- explaining the optical correction of ametropia with contact lenses.

Process/Skill Questions

- Why is it important to learn each office's procedures before initiating records?
- Why does ametropia require optical correction?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Specialty

Task Number 48

Identify staining related to contact lenses.

Definition

Identification should include

- staining related to contact lens fit (e.g., arcuate staining, 3 & 9 o'clock staining)
- staining related to physiological complications (e.g., diffuse stippling, foreign body).

Process/Skill Questions

- What causes staining?
- What are the differences between the two types of staining? What are the similarities?
- What is needed to view a stain?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Task Number 49

Identify common complications related to contact lenses.

Definition

Identification should include

- corneal ulcer
- neovascularization
- giant papillary conjunctivitis
- microcysts
- edema
- infections.

Process/Skill Questions

- What are methods for prevention complications?
- What are signs and symptoms of giant papillary conjunctivitis? Edema?
- What complication is associated with noncompliance of contact lens wear and care?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Health Education
 - HOSA Bowl
-

Task Number 50

Examine the evolution of refractive surgery.

Definition

Examination should include

- defining radial keratotomy (RK)
- defining photorefractive keratectomy (PRK)
- defining automated lamellar keratoplasty (ALK)
- defining laser-assisted in situ keratomileusis (LASIK)
- discussing the challenges of contact lens for a refractive patient.

Process/Skill Questions

- Which of these refractive surgeries is the most common?
- What were the challenges associated with RK?
- What are the advantages and disadvantages of LASIK surgery?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Health Education
 - HOSA Bowl
-

Task Number 51

Perform specialty tests.

Definition

Performance should include the following tests:

- Pinhole test
- Super pinhole test
- Amsler Grid
- Perform BA T test
- Stereopsis test
- Ishihara test
- Humphrey visual field (A)
- Ocular Coherence Tomography (A)
- A and B scan (A)
- Schirmer Test
- Fundus Photography (A)
- Fluorescein Angiography (A)
- Orbscans/Cornealtopography
- Pachymetry
- Keratometry

Process/Skill Questions

- What is the function of an Amsler Grid?
- What equipment is necessary for each test?
- What patient preparation is necessary for each test? Equipment preparation?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Specialty

Teamwork Events

- HOSA Bowl
-

Exploring Eyeglass Dispensing

Task Number 52

Apply appropriate measurements and terminology.

Definition

Application should include

- identifying standard abbreviations and optical terms
- using the metric system for measurements
- defining frame abbreviations.

Process/Skill Questions

- What are some commonly used abbreviations?
- What are commonly used optical terms?
- What unit of measurement is used for frame measurements?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Medical Math

Health Professions Events

- Clinical Specialty
-

Task Number 53

Identify the components of an eyeglass prescription.

Definition

Identification should include

- sphere
- cylinder
- axis
- add
- prism amount
- base direction
- special instructions.

Process/Skill Questions

- What does the term “balance” mean?
- What are the meanings of the following abbreviations: OD, OS, OU?
- What would an add-on prescription indicate?

HOSA Competitive Events (High School)

Health Professions Events

- Clinical Specialty
-

Task Number 54

Identify various lens types, materials, and treatments.

Definition

Identification should include

- differentiating between single vision, multifocal, aphakic, low vision, and occupational lens types
- differentiating between commonly used ophthalmic lens materials
- identifying commonly used lens treatments and their applications (e.g., anti-reflective, anti-scratch, polarization, photochromic, ultra-violet, blue light protection)
- determining appropriate choice of multifocal types

- determining total reading power
- determining intermediate power.

Process/Skill Questions

- What are the advantages and disadvantages of each type?
- What are the uses of each type of lens?
- What lens treatment is best for assisting with night driving?

HOSA Competitive Events (High School)

Health Professions Events

- Clinical Specialty
-

Task Number 55

Identify progressive addition lenses (PAL).

Definition

Identification should include

- identifying basic PAL characteristics
- explaining the advantages and disadvantages of PAL
- differentiating between basic PAL and near variable focus lenses.

Process/Skill Questions

- What makes a PAL different from other types of multi-focals?
- When would a patient benefit from near variable focus lenses?
- How can you determine the manufacturer of a PAL?

HOSA Competitive Events (High School)

Health Professions Events

- Clinical Specialty
-

Task Number 56

Demonstrate frame-adjustment techniques.

Definition

Demonstration should include

- defining *standard alignment*
- applying standard alignment to plastic frames
- applying standard alignment to metal frames
- applying standard alignment to rimless and semi-rimless frames
- adjusting a frame to fit a patient
- using pliers and hands to heat, bend, and shape frames to adjust eyeglasses to fit patients.

Process/Skill Questions

- What is the standard temple spread for a bench aligned frame?
- What safety precautions need to be followed when heating frames?
- What part of the frame adjustment keeps the glasses from sliding down the patient's nose?

HOSA Competitive Events (High School)

Health Professions Events

- Clinical Specialty

Leadership Events

- Medical Photography

Task Number 57

Select frames with patient consultation.

Definition

Selection should include

- taking measurements
- assisting clients in selecting frames according to style and color
- ensuring that frames are coordinated with facial and eye measurements and optical prescriptions

- evaluating prescriptions in conjunction with clients' vocational and avocational visual requirements.

Process/Skill Questions

- What is the most accurate method for measuring a pupillary distance?
- What is the difference between warm and cool skin tones?
- What are the advantages and disadvantages of verbal questioning versus a written questionnaire during a consultation?

HOSA Competitive Events (High School)

Health Professions Events

- Clinical Specialty
-

Task Number 58

Perform a sale.

Definition

Performance should include

- providing cost information, including insurance benefits and warranties
- completing a work order
- processing payment
- providing a patient with a receipt and delivery date
- ordering and purchasing frames and lenses, according to the order.

Process/Skill Questions

- Why is it beneficial to keep track of inventory and sales?
 - Why is it important to provide a realistic delivery date?
 - Why should you share a patient's benefits with him/her before beginning the selection process?
-

Task Number 59

Demonstrate the delivery of eyewear.

Definition

Demonstration should include

- final inspection and verification of eyewear by a licensed professional
- adjustment of the frame to a patient
- visual assessment
- instructions for wear and care
- determining final payments, as needed.

Process/Skill Questions

- Why must a licensed optician perform the final inspection of eyewear?
- Why is it important to give care instructions?
- What final adjustments might be needed for eyewear?

HOSA Competitive Events (High School)

Health Professions Events

- Clinical Specialty

Exploring Professional Choices

Task Number 60

Describe the process and requirements for obtaining industry certifications related to the Visual Care Technician II course.

Definition

The description should include a list of industry certifications related to the course and the process/requirements for obtaining the certifications from

- official websites of the testing organization and/or vendor
- materials from publishers that have developed practice materials and tests based on
- information from the testing organization and/or vendor
- information from certified instructors or industry-certified professionals

- information from the Virginia Department of Education’s [Administrative Planning Guide](#)
- information in the “Introduction/Course Description” section of this document.

HOSA Competitive Events (High School)

Teamwork Events

- Health Career Display
-

Task Number 61

Identify testing skills and strategies for a certification examination.

Definition

The identification of testing skills and strategies should be undertaken by

- conducting an Internet research project
 - reviewing materials from publishers
 - interviewing certified instructors and/or industry-certified professionals.
-

Task Number 62

Demonstrate the ability to successfully complete selected practice examinations (e.g., practice questions similar to those on certification exams).

Definition

Demonstration should include obtaining and successfully completing practice examinations for selected certifications related to the course obtained from vendor sites and/or materials from publishers.

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Specialty

Describing the Opioid Crisis

Task Number 63

Describe the history and current state of the opioid crisis in the United States.

Definition

Description should include

- the relationship between opioid prescribing and illicit opioid use to overall opioid overdose deaths
- the prevalence of co-occurring mental health disorders
- the shift in attitudes in the 1990s toward pain management and use of opioids, including the role of pharmaceutical marketing
- the stigma associated with addiction and the changing view of addiction from a moral failing to a chronic, relapsing disease
- statistics, trends, and demographics surrounding the crisis
- population health and other public health aspects of the crisis, including its effects on family and neonates, as well as overall health costs.

Process/Skill Questions

- How are opioids created?
- Can opioids be safely prescribed to patients taking psychotropic drugs?
- How does society stereotype individuals with a history of drug addiction?
- What are the current trends that have contributed to the nationwide opioid crisis?
- How has the opioid epidemic affected emergency rooms and the first responder system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
 - Public Service Announcement
-

Task Number 64

Describe the history and current state of the opioid crisis in Virginia.

Definition

Description should include

- the relationship between opioid prescribing and illicit opioid use to overall opioid overdose deaths
- the prevalence of co-occurring mental health disorders
- the shift in attitudes in the 1990s toward pain management and use of opioids, including the role of pharmaceutical marketing
- the stigma associated with addiction and the changing view of addiction from a moral failing to a chronic, relapsing disease
- statistics, trends, and demographics surrounding the crisis
- population health and other public health aspects of the crisis, including its effects on family and neonates, as well as overall health costs
- the Virginia Department of Health's [Declaration of a Public Health Emergency](#) on November 21, 2016
- proposed legislation to address the crisis in Virginia (i.e., [House Bill 2161](#) and [Senate Bill 1179](#), which require the secretary of health and human resources to convene a workgroup to establish educational guidelines for training healthcare providers in the safe prescribing and appropriate use of opioids)
- the development of curricula and educational standards regarding opioid addiction.

Resource: [The Opioid Crisis Among Virginia Medicaid Beneficiaries](#)

Process/Skill Questions

- What agencies participated in the governor's task meeting on the opioid crisis?

- What educational organizations will be tasked with providing opioid training to their students?
- What is the benefit of educating future medical professionals about opioid addiction?
- What is the current attitude in society about opioid use and addiction?
- How is the local community affected by the opioid epidemic?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
 - Public Service Announcement
-

Task Number 65

Define the pharmacological components and common uses of opioids.

Definition

Definition should include

- plant-based opioids (e.g., opium from poppy seeds)
- names of legal and illegal opioids
- [heroin](#)
- names of the most common opioids
- [fentanyl](#)
- medical diagnoses and injuries associated with opioid prescriptions
- [commonly used terms](#).

Resource: [Prescription Pain Medications](#), National Institute on Drug Abuse for Teens

Process/Skill Questions

- For what illnesses are opioids commonly prescribed?
- What is the current medical protocol when opioids are prescribed?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing
-

Examining the Key Factors of Drug Addiction

Task Number 66

Examine the science of addiction.

Definition

Examination should include

- biopsychosocial aspects of addiction
- the role of endorphins and dopamine
- the role of religious beliefs
- behavioral aspects of addiction
- life cycle of addiction
- misuse of opioids.

Process/Skill Questions

- How will understanding the physiological absorption of opioids in the body provide a holistic assessment?
 - What spiritual characteristics might be observed in the science of addiction?
 - What are some genetic explanations for some family members being more prone to addiction?
-

Task Number 67

Explain prevention and early intervention strategies.

Definition

Explanation should include

- risk and protective factors in opioid addiction
- specific populations at risk of addiction
- motivational interviewing and other communication strategies
- naloxone co-prescribing
- roles of family and social institutions in prevention and early intervention.

Resources:

- [Prevention Tip Card](#), Office of the Attorney General of Virginia
- [Prescription Opioids: Even When Prescribed by a Doctor](#) (video), Centers for Disease Control and Prevention (CDC)

Process/Skill Questions

- What are the physiological characteristics of opioid addiction?
 - What demographic is most affected by the opioid epidemic? What are some explanations for this?
 - How can provision of naloxone and training in its use be sustained financially?
 - What obligations do families and society as a whole have in preventing and providing early intervention related to drug addiction?
-

Task Number 68

Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).

Definition

Identification should include

- DSM-5 Criteria for Substance Use Disorders

- American Society of Addiction Medicine (ASAM) Criteria (i.e., The Six Dimensions of Multidimensional Assessment)
- CONTINUUM, The ASAM Criteria Decision Engine
- clinical and behavioral aspects of addiction
- practice-appropriate screening tools, including co-morbidity screening.

Process/Skill Questions

- What are DSM-5 and ASAM and what information do they provide to healthcare professionals?
- What are clinical and behavioral elements of addiction that should be recognized by healthcare professionals?
- Who is responsible for providing the necessary screening tools and training?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Behavioral Health
- Knowledge Test: Medical Law and Ethics

Health Professions Events

- Clinical Nursing

Task Number 69

Describe the treatment models of addiction therapy.

Definition

Description should include

- a recognition that addiction is a chronic disease
- evidence-based treatment models for addiction in general and opioid addiction in particular
- medication-assisted treatment
- the continuum of care in opioid addiction treatment
- how and when to make a referral for treatment
- the roles in an interdisciplinary addiction team
- the role of peers in the treatment of addiction
- the difference between a drug culture and recovery culture
- the management of patients in recovery, including factors contributing to relapse.

Process/Skill Questions

- How many treatment models exist for addiction therapy? Why is one model better than the other?
- What are the advantages of evidence-based treatments and models?
- What medication-assisted treatment programs are available? Who provides them?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Behavioral Health
- Knowledge Test: Medical Law and Ethics

Health Professions Events

- Clinical Nursing
-

Task Number 70

Describe the medication management antidote used to prevent fatal opioid overdoses.

Definition

Description should include

- availability and use of naloxone
- naloxone training (e.g., [REVIVE!](#))
- naloxone training agencies
- monitoring of concurrent prescriptions.

Resources:

- [Frequently Asked Questions about Naloxone](#), Virginia Department of Health
- [How to prepare naloxone for administration](#), Virginia Department of Behavioral Health and Developmental Services

Process/Skill Questions

- What is naloxone?

- How much does naloxone cost with health insurance? How much does naloxone cost without health insurance?
- Who should receive naloxone training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
 - Knowledge Test: Pharmacology
-

Understanding Pain Management Protocols

Task Number 71

Explain the science of physiological and mental pain.

Definition

Explanation should include

- definition of pain from the International Association for the Study of Pain (IASP)
- neurobiological basis of pain
- biopsychosocial model of pain
- types of pain (e.g., neuropathic)
- acute, sub-acute, and chronic pain, including pain generation
- spinal and brain modulation, behavioral adaptation and maladaptation, and the continuum from acute to chronic disabling pain
- the underlying science of pain relief.

Process/Skill Questions

- What is the IASP definition of pain?
- How can a medical professional get a patient to describe physiological pain?
- What assessment tools can be used to help patients describe physiological pain? How do tools differ for describing mental pain?
- How are pain and levels of pain categorized?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
- Creative Problem Solving
- HOSA Bowl

Task Number 72

Describe the diagnostic tools used in developing pain management plans.

Definition

Description should include

- pain-related health history and examination
- understanding the role of family in supporting individuals in need of pain management
- practice-appropriate screening tools that include aspects such as mood and function
- the use and limitations of pain scales
- differential diagnosis of pain and its placement on the pain continuum.

Resource: [Promoting Safer and More Effective Pain Management](#), CDC

Process/Skill Questions

- What are the Wong-Baker, LEGO, and Hospice assessment tools?
- How do pain assessment tools vary across the life span?
- When completing an assessment, is pain considered subjective or objective?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
 - Creative Problem Solving
 - HOSA Bowl
-

Task Number 73

Describe pain treatment options available to various populations of patients.

Definition

Description should include

- special populations in pain management, such as palliative/end-of-life care patients, patients with cancer, pediatric patients, and geriatric populations
- non-pharmacologic treatment of pain, including active care and self-care, evidence- and non-evidence-based approaches, and multimodal pain management
- non-opioid pharmacologic management of pain
- the challenges in discussing the psychological aspects of pain and the role of the central nervous system
- adverse drug event prevention for all pain medications
- the roles in an interdisciplinary pain management team
- the significance of issues such as anxiety, depression, and sleep deprivation in pain management
- the placebo effect
- goals and expectations in the treatment of pain, based on diagnosis and pain continuum
- when to make a pain referral and to whom.

Resources:

- [CDC Fact Sheet for Prescribing Opioids for Chronic Pain](#)
- [CDC Guidelines for Prescribing Opioids for Chronic Pain](#)

Process/Skill Questions

- What pain management resources are available for special populations?
- What are alternative forms of pain management?
- What role does the mind play in pain management?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
 - Creative Problem Solving
 - HOSA Bowl
-

Task Number 74

Describe the effects of opioid dependency on the human body systems.

Definition

Description should include the short- and long-term effects of opioids on the following:

- Nervous system
- Respiratory system
- Circulatory system
- Digestive system
- Skeletal system

Resource: [Drugs and Your Body](#), Scholastic

Process/Skill Questions

- How does the misuse of opioids affect nutrition and weight loss?
- How might opioid misuse be evident in a person's vital signs?
- How do opioids affect the brain as the control center for homeostasis?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 75

Explain the mechanism and physical effects of opioids on the human body.

Definition

Explanation should include the following:

- Mechanism of action and metabolism of opioids
- Development of tolerance, dependence, and addiction
- Health consequences of drug misuse
 - HIV, hepatitis, and other infectious diseases
 - Cancer
 - Cardiovascular effects
 - Respiratory effects
 - Gastrointestinal effects
 - Musculoskeletal effects
 - Kidney damage
 - Liver damage
 - Neurological effects
 - Hormonal effects
 - Prenatal effects
 - Other health effects
 - Mental health effects
 - Death
- Withdrawal
 - Causes
 - Timeframe (i.e., peaks of withdrawal symptoms)
 - Physical signs (e.g., nausea, diarrhea, vomiting, cold flashes)

Process/Skill Questions

- What are the short- and long-term effects of withdrawal dependence symptoms?
- How long can the human body function while exhibiting the symptoms of withdrawal?
- What are other medical conditions that may arise because of the symptoms of physical dependence?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 76

Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.

Definition

Explanation should include

- appropriate use of different opioids in various practice settings
- the interactions, risks, and intolerance of prescription opioids
- the role and effectiveness of opioids in acute, sub-acute, and chronic pain
- a reassessment of opioid use based on stage of pain
- contemporary treatment guidelines, best practices, health policies, and government regulations related to opioid use
- use of opioids in pain management of patients with substance abuse disorders, in recovery, and in palliative/end-of-life care.

Process/Skill Questions

- When should risk factors regarding opioids be reviewed with the patient?
- What are the options when treating patients with a history of substance abuse?
- What government regulations and policies are in place to improve the safe administration of opioids?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Teamwork Events

- Creative Problem Solving
 - HOSA Bowl
-

Task Number 77

Describe the withdrawal and tapering side effects of opioid use.

Definition

Description should include

- characteristics of acute and protracted withdrawal from opioid dependence or addiction
- tapering
- pain contracts or agreements.

Process/Skill Questions

- What are the stages of withdrawal in opioid abuse transition?
- What medications might be needed in the withdrawal stage?
- What information should be included in the pain management contract?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing
-

Task Number 78

Describe storage and disposal options for opioids.

Definition

Description should include

- medicine take-back options (e.g., [National Drug Take Back Day](#))
- disposal in the household trash and flushing certain potentially dangerous medicines down the toilet.

Resources:

- [Disposal of Unused Medicines: What You Should Know](#), Food and Drug Administration (FDA)
- [Prescription Drug Abuse and Tips for Proper Disposal](#), Office of the Attorney General of Virginia

Process/Skill Questions

- How should medications be stored in the house?
- What is National Prescription Drug Take Back Initiative?
- What is the *black box*?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing
-

Task Number 79

Explain community resources for education about opioid use.

Definition

Explanation should include key components of and resources for patient education in the use of opioids, including

- risks
- benefits
- side effects
- tolerance
- signs of sedation or overdose

- naloxone, including its storage and disposal.

Process/Skill Questions

- What resources for opioid education are available locally, statewide, and nationally?
- Where should the patient first be informed about the resources available?
- How does social media aid in patient education on opioid addiction?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing

Working with Patients and Caregivers

Task Number 80

Describe key communication topics involving opioids for patients.

Definition

Description should include

- benefits and risks of opioids
- opioid risk screening (i.e., taking a social, medical, and financial history)
- risk mitigation (e.g., naloxone, safe storage, pain contracts)
- medication tapers and/or discontinuation of therapy.

Process/Skill Questions

- What are the benefits of using opioids in medicine?
- What is the relationship between demographics and risk of opioid addiction?
- How does culture influence risk factors in opioid abuse?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Nursing
-

Task Number 81

Describe communication topics for caregivers and family members.

Definition

Description should include

- basic knowledge about opioids
- signs of addiction
- treatment options for addiction
- naloxone training for caregivers
- legal issues related to misuse.

Process/Skill Questions

- What rights do caregivers have in regard to medical information of the abuser?
- What legal steps might the caregiver or family have to take for treatment?
- Where can the caregiver or family members receive naloxone training? Are children of opioid abusers eligible for training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Nursing

SOL Correlation by Task

Identify ocular injuries and emergencies.	Science: BIO.4d
Identify the signs, symptoms, and treatments of common ocular diseases and disorders.	Science: BIO.4d
Identify the signs, symptoms, and treatment of systemic conditions.	Science: BIO.4d
Identify topical medications.	
Identify key systemic medications.	
Document prescriptions.	
Explain various routes for administering pharmaceuticals.	English: 12.5
Assist a doctor with contact lens patients.	
Assist in the application of contact lenses.	
Identify staining related to contact lenses.	
Identify common complications related to contact lenses.	
Examine the evolution of refractive surgery.	
Perform specialty tests.	Science: PH.8
Apply appropriate measurements and terminology.	Science: PH.8
Identify the components of an eyeglass prescription.	Science: PH.8
Identify various lens types, materials, and treatments.	
Identify progressive addition lenses (PAL).	
Demonstrate frame-adjustment techniques.	
Select frames with patient consultation.	
Perform a sale.	
Demonstrate the delivery of eyewear.	
Describe the process and requirements for obtaining industry certifications related to the Visual Care Technician II course.	English: 12.5, 12.6, 12.7, 12.8
Identify testing skills and strategies for a certification examination.	
Demonstrate the ability to successfully complete selected practice examinations (e.g., practice questions similar to those on certification exams).	
Describe the history and current state of the opioid crisis in the United States.	English: 11.5, 12.5
Describe the history and current state of the opioid crisis in Virginia.	English: 11.5, 11.8, 12.5, 12.8
Define the pharmacological components and common uses of opioids.	English: 11.3, 11.8, 12.3, 12.8
Examine the science of addiction.	English: 11.5, 12.5
Explain prevention and early intervention strategies.	English: 11.5, 11.8, 12.5, 12.8

Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).	English: 11.5, 12.5
Describe the treatment models of addiction therapy.	English: 11.5, 12.5
Describe the medication management antidote used to prevent fatal opioid overdoses.	English: 11.5, 11.8, 12.5, 12.8
Explain the science of physiological and mental pain.	English: 11.3, 11.5, 12.3, 12.5
Describe the diagnostic tools used in developing pain management plans.	English: 11.5, 12.5
Describe pain treatment options available to various populations of patients.	English: 11.5, 11.8, 12.5, 12.8
Describe the effects of opioid dependency on the human body systems.	English: 11.5, 12.5
Explain the mechanism and physical effects of opioids on the human body.	English: 11.5, 12.5
Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.	English: 11.5, 12.5
Describe the withdrawal and tapering side effects of opioid use.	English: 11.5, 12.5
Describe storage and disposal options for opioids.	English: 11.5, 11.8, 12.5, 12.8
Explain community resources for education about opioid use.	English: 11.5, 12.5
Describe key communication topics involving opioids for patients.	English: 11.5, 12.5
Describe communication topics for caregivers and family members.	English: 11.5, 12.5

Opioid Abuse Prevention Education

This [Opioid Abuse Prevention](#) document includes resources for opioid abuse prevention education from kindergarten to 12th grade.

Other Opioid Resources

Virginia Department of Behavioral Health and Developmental Services. Revive! Opioid Overdose and Naloxone Education for Virginia. [Naloxone Fact Sheet](#) (PDF).

Virginia Department of Behavioral Health and Developmental Services. [Revive! Opioid Overdose and Naloxone Education for Virginia](#) (website).

Office of National Drug Control Policy, White House. [Fentanyl: Safety Recommendations for First Responders](#) (PDF).

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Alcohol](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Bath Salts](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Cocaine](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: E-Cigarette](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Heroin](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Marijuana](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: MDMA](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Meth](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Pain Medicine](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Spice \(K2\)](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Tobacco and Nicotine](#) (website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Other Drugs People Use and Misuse](#) (website; PDF available)

Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

- Certified Optometric Assistant (COA) Examination
- College and Work Readiness Assessment (CWRA+)
- National Career Readiness Certificate Assessment
- Workplace Readiness Skills for the Commonwealth Examination

Concentration sequences: *A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.*

- Vision Care Technician I (8397/36 weeks)

Career Cluster: Health Science	
Pathway	Occupations
Health Informatics	Medical Assistant
Support Services	Front Office Assistant
Therapeutic Services	Optician