



Great Oaks Surgical Technology Essential Skills Profile

This profile provides an outline of the skills required for the successful completion of this career program. Additional information is located on the Great Oaks website at

<https://hs.greatoaks.com/future-students/essential-skills-for-high-school-programs> and select the corresponding career program.

Recommended WorkKeys ® Scores for Surgical Technology

Applied Mathematics – 4
Workplace Documents – 4
Graphic Literacy – 4

*Practice tests and more information at <https://jobseeker.ohiomeansjobs.monster.com/Assessments/Home.aspx>

Recommended Essential Skills to Successfully Complete the Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Low
Oral Communication	The ability to express/explain ideas	Medium
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Stooping, bending, walking, demonstrating, and using equipment such as weights	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	High
Sequencing	Ability to determine and follow a logical or defined series of steps in a sequential manner	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	High
Ability to work accurately, recheck, and correct work, to an industry standard	High
Dependability (Attendance and Punctuality)	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium

Ability to use tools of trade (surgical lasers or accessories, surgical clamps or clips or forceps or accessories, steam autoclaves or sterilizers, operating room patient positioning devices or accessories, electrosurgical or electrocautery equipment, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in an applied setting	Low
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color	Medium
Spatial relationship	High
Ability to organize work process/follow defined procedures	High
Ability to use various measuring tools with consistency and accuracy	High
Ability to reference charts to determine course of action or equivalencies	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dexterity (fine finger)	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High
Speaking: Talking to others to convey information effectively	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High

Applied Mathematics Skills * Recommended WorkKeys® Scores 4	
Understanding of numbers	Work with whole numbers and decimals. Convert fractions to decimals and/or convert from decimals to percentages.
Mathematical Calculations	Use one or two-step calculations to solve problems, decide what information, calculations or unit conversions to use to answer a problem
Solving problems with math	Solve problems that require mathematical operations with multiple units (e.g. 6 feet 4 inches or 4 hours 30 minutes), identify calculation mistakes
Workplace Documents Skills * Recommended WorkKeys® Scores 4	
Complexity	Mostly clear and direct but with multiple details, may have complex sentences and/or conditional situations
Information and detail	May need to meet inferences, differentiate/interpret details
Vocabulary	Industry jargon, acronyms, use context to understand words
Graphic Literacy Skills * Recommended WorkKeys® Scores 4	
Using Charts/graphs	Locate information in charts or graphs
Interpreting Information	Compare two or more pieces of information, identify trends/patterns, make inferences and identify graphics that accurately represent data

Additional Recommended Abilities

Oral Comprehension	Listening to and understanding information and ideas presented through spoken words and sentences.
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.

Knowledge Required in Surgical Technology Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Medicine and Dentistry	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive healthcare measures.

Additional Considerations

Ability to stand for long periods of time	Moving around, stooping, and bending
Wear a uniform	Pass background screening (BCI)
Work as a team member	Visually astute and detail oriented
Enjoy helping others	STRONG memorization skills are needed
Must be able to deal with bodily fluids, smells, and injuries	Maintain cleanliness standards including own hygiene
Open-minded to diverse life styles and environments	Strong attention to detail and safety awareness

Surgical Technology Work Activities

Verify the identity of patient or operative site.	Monitor and maintain aseptic technique throughout procedures.
Cover patients with surgical drapes to create and maintain a sterile operative field.	Maintain an unobstructed operative field, using surgical retractors, sponges, or suctioning and irrigating equipment.
Coordinate or participate in the positioning of patients, using body stabilizing equipment or protective padding to provide appropriate exposure for the procedure or to protect against nerve damage or circulation impairment.	Discuss with surgeon the nature of the surgical procedure, including operative consent, methods of operative exposure, diagnostic or laboratory data, or patient-advanced directives or other needs.
Apply sutures, staples, clips, or other materials to close skin, fascia, or subcutaneous wound layers.	Determine availability of necessary equipment or supplies for operative procedures.
Prepare and apply sterile wound dressings.	Assist with patient resuscitation during cardiac arrest or other life-threatening events.
Clamp, ligate, or cauterize blood vessels to control bleeding during surgical entry, using hemostatic clamps, suture ligatures, or electrocautery equipment.	Assess skin integrity or other body conditions upon completion of the procedure to determine if damage has occurred from body positioning.
Obtain or inspect sterile or non-sterile surgical equipment, instruments, or supplies.	Pass instruments or supplies to surgeon during procedure.
Operate sterilizing devices.	Remove patient hair or disinfect incision sites to prepare patient for surgery.
Monitor patient intra-operative status, including patient position, vital signs, or volume and color of blood.	Assist in the insertion, positioning, or suturing of closed-wound drainage systems.
Incise tissue layers in lower extremities to harvest veins.	Assist members of surgical team with gowning or gloving.
Gather, arrange, or assemble instruments or supplies.	Coordinate with anesthesia personnel to maintain patient temperature.
Adjust and maintain operating room temperature, humidity, or lighting, according to surgeon's specifications.	Postoperatively inject a subcutaneous local anesthetic agent to reduce pain.
Assist in applying casts, splints, braces, or similar devices.	Transport patients to operating room.
Insert or remove urinary bladder catheters.	Assist in volume replacement or autotransfusion techniques.
Maintain a proper sterile field during surgical procedures.	Count sponges, needles, and instruments before and after operation.
Operate, assemble, adjust, or monitor sterilizers, lights, suction machines, or diagnostic equipment to ensure proper operation.	Maintain files and records of surgical procedures.
Have knowledge of hemostatic agents	Knowledge of assisting in the insertion, positioning or suturing of closed-wound drainage systems

Technology

General computer knowledge and the ability to use Google and/or Microsoft for scheduling
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Certifications Students Can Earn

Credential	Ohio Graduation Points
Sterile Processing Distribution Technician Certification	12
American Heart Association Basic Life Support CPR, First Aid Certification	1

Possible College Credits

College Credit Plus (CCP)	The CCP program provides Ohio high school students an opportunity to complete college courses and earn transcribed credit.
Career Technical Assurance Guides (CTAGs)	CTAGs award college credit for career-technical coursework to students who complete an approved course and earn a qualifying score at the end of course exam.
Articulated Credit	Some Great Oaks career-technical programs have agreements with colleges where students can earn credit toward a specific degree.

Please speak with your school counselor, Great Oaks counselor and/or career technical instructor to learn more about these potential opportunities.

Possible Career Pathways

Sterile Processing Technician	Surgical or Emergency Room Nurse
Sterile Processing Distribution Manager	Surgical Technician