



## Great Oaks Surgical Technology Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

### Recommended WorkKeys® Scores for Surgical Technology

Applied Mathematics-5	Graphic Literacy-4
Workplace Documents-4	

\*Practice tests and more information at [www.act.org/workkeys](http://www.act.org/workkeys)

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

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	High
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	Extended stooping, bending, walking, and lifting; must be able to lift a minimum of 50 pounds	Medium
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, interpret, and retain:	
Multi step oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	High

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 applied setting	Medium
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

<b>Reading Skills *See Recommended WorkKeys® Scores Above</b>	
Grade level: Text Readability 12.0	Strong Reading Skills
<b>Math Skills *See Recommended WorkKeys® Scores Above</b>	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios, formulas, square roots	Pre-Algebra/Algebra/Geometry
Strong math skills	

### Additional Abilities Required

<b>Oral Comprehension</b>	The ability to listen to and understand information and ideas presented through spoken words and sentences.
<b>Arm-Hand Steadiness</b>	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
<b>Finger Dexterity</b>	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**

<b>Customer and Personal Service</b>	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.
<b>English Language</b>	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
<b>Medicine and Dentistry</b>	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 health-care measures.

**Additional Considerations**

Solid reading, writing, and math skills	Moving around, stooping, bending, and standing for long periods of time
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
Maintain cleanliness standards including own hygiene	Must be able to deal with bodily fluids, smells, and injuries
Understand and maintain confidentiality	Open-minded to diverse life styles and environments

**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.

**Technology**

Medical software	Spreadsheet software
------------------	----------------------

**Available Certifications**

Sterile Processing Distribution Technician Certification (12 points)	CPR/First Aid Certification (1 Point)
American Heart Association Basic Lifesaver Certification	American Heart Association Heart Saver First Aid Certification
American Heart Association Basic Life Support for Healthcare Providers	

**Possible College Credits**

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> <li>• If you successfully completed your career-technical program and passed certain required assessments.</li> <li>• If you attend a similar program at a public Ohio college or university.</li> </ul> <p>For more information, go to <a href="http://www.transfercredit.ohio.gov">www.transfercredit.ohio.gov</a></p>
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> <li>• Cincinnati State Technical and Community College (Health Technologies, up to 14 credit hours possible)</li> </ul>

\*Additional college or post-secondary education may be required in this field

**Possible Career Pathways**

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