Radiography

Associate in Science Degree

Limited-Access

This program is designed for students who seek immediate employment in the healthcare field of Radiography. The radiographer is an integral member of the medical team dedicated to patient care whose primary role is to operate imaging equipment and perform technical procedures for the diagnosis and treatment of injury and disease. Radiography is a challenging and growing profession with additional career opportunities in computed tomography, magnetic resonance imaging, mammography, angiography, and quality assurance. With professional experience and additional education, management and education are career options. Radiographers are employed primarily in hospitals. Positions are also available in imaging centers, urgent care clinics, private physician offices, industry, and civil service and public health service facilities.

The program is accredited by the Joint Review Committee on Education in Radiology Technology. Graduates are eligible to take the national certifying examination administered by the American Registry of Radiologic Technologists.

Radiography is a limited-access program. Admission to Valencia does not imply acceptance to the Radiography Program; students must apply and be accepted to the program. General admission procedures for this program are found in the Admissions section of this catalog. The Division of Allied Health provides information about specific admission criteria.

Estimated program expenses are given in the Financial section of this catalog.

Admission requirements that must be satisfied prior to submitting an application to the A.S. Degree Program in Radiography are:

• Review the general admission requirements for Health Sciences programs in the Admissions section of this catalog.
• Submit a completed Valencia Application for Admission; satisfy the requirements for degree-seeking status and be in active student status
• Satisfy the college entry testing requirements and satisfactorily complete all mandatory courses in reading, New Student Experience (SLS 1122), mathematics, English, and English for Academic Purposes in which you are placed
• Complete the Radiography Prerequisite for Admission with a minimum grade of "C"
• Have a minimum overall college GPA of 2.5 (including transfer work)
• Satisfy the designated entrance test requirements for Health Sciences programs
• Submit a completed Valencia Radiography Program application with the application fee

The identified courses in the program curriculum include all courses that are required for the Radiography A.S. degree. A minimum grade of C must be achieved in all courses in the program curriculum, including the prerequisite course required for admission.

The courses in the curriculum are progressive in nature, with one course building on the preceding course. Because of this progressive relationship, all courses in a term must be completed with a minimum grade C in order to continue to the next term. If a student achieves less than a C or withdraws from any course that is required for the Radiography A.S. degree, the student will not be allowed to continue in the program.

Students are strongly encouraged to consult a Health Sciences advisor for assistance in determining the best education plan for their career goals.

Start Right

Degree-seeking students enrolling at Valencia for the first time will have a limited range of courses from which to choose for their first 18 college-level credits. Within the first 18 college credit hours, you will be required to take ENC1101 (3 credits), and if applicable, SLS 1122 (3 credits) and a mathematics course appropriate to your selected meta-major (3 credits). The remaining courses will be chosen from the General Education Core Courses in humanities (3 credits), science (3 credits), or social science (3 credits), and/or the introductory courses within the A.S. degree programs. For specific courses see the Foundation Courses on the "Program Requirements" tab. For course sequencing recommendations, see your Career Program Advisor or create an education plan by logging into Atlas, clicking on the LifeMap tab and clicking My Education Plan.
Potential Careers

• Radiographer
• Radiologic Technologist
• Radiologic Technician

Salary & Earnings Information


Contacts

Health Sciences Program Advisor, West Campus: HealthScienceAdvising@valenciacollege.edu (healthscienceadvising@valenciacollege.edu) or 407-582-1288.
For Information Sessions, Admission Guide, Program Application, and the most updated information, visit our website at: valenciacollege.edu/west/health.

Alternative Ways to Earn Credit

If you have earned your credential as a Registered Technologist in Radiography R.T.(R), you may be eligible to receive credit toward this A.S. degree. For more information, visit: valenciacollege.edu/asdegrees/transferagreements.cfm

Program Outcomes

• Students will be clinically competent.
• Students will be able to communicate.
• Students will evaluate the importance of professional growth and development.
• Students will use critical thinking and problem solving skills.

<table>
<thead>
<tr>
<th>Prerequisite for Admission</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 2093C</td>
<td>4</td>
</tr>
<tr>
<td>BSC 2094C</td>
<td>4</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>3</td>
</tr>
<tr>
<td><strong>Year I</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Summer Term</strong></td>
<td></td>
</tr>
<tr>
<td>RTE 1000</td>
<td>2</td>
</tr>
<tr>
<td>RTE 1111C</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fall Term</strong></td>
<td></td>
</tr>
<tr>
<td>RTE 1418</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1503C</td>
<td>4</td>
</tr>
<tr>
<td>RTE 1804L</td>
<td>2</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring Term</strong></td>
<td></td>
</tr>
<tr>
<td>RTE 1458</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1513C</td>
<td>4</td>
</tr>
<tr>
<td>RTE 1814L</td>
<td>2</td>
</tr>
<tr>
<td><strong>Year II</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Summer Term</strong></td>
<td></td>
</tr>
<tr>
<td>RTE 2762</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1523C</td>
<td>4</td>
</tr>
<tr>
<td>RTE 1824L</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fall Term</strong></td>
<td></td>
</tr>
<tr>
<td>RTE 2563</td>
<td>4</td>
</tr>
<tr>
<td>RTE 2834L</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>RTE 2385</td>
<td>RADIATION BIOLOGY AND PROTECTION</td>
</tr>
<tr>
<td>CGS 1060C</td>
<td>INTRODUCTION TO COMPUTERS</td>
</tr>
<tr>
<td>RTE 2844L</td>
<td>RADIOGRAPHIC CLINICAL EDUCATION V</td>
</tr>
<tr>
<td>RTE 2061</td>
<td>RADIOGRAPHIC SEMINAR</td>
</tr>
<tr>
<td>RTE 2782</td>
<td>RADIOGRAPHIC PATHOLOGY</td>
</tr>
<tr>
<td></td>
<td>Humanities (See Gen. Ed. Core Requirement)</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 77.0

- This course must be completed with a grade of C or better.
- This course has a prerequisite; check description in Valencia catalog.
- This is a general education course.

**Notes:**

All accepted applicants are required to submit applications through Valencia for a criminal background check and drug testing. Applicants for Valencia’s Health Sciences programs must be free of offenses that would disqualify them from a student clinical experience in a healthcare setting and must have their civil rights intact. This policy is in response to requirements by clinical agencies and state/federal regulations.

Specialized program courses are offered on the West Campus.

Specialized courses may not be offered every session or on every campus.

Once you complete your A.S. degree Radiography, you can now continue on and get your Bachelor’s degree from Valencia in Radiologic and Imaging Sciences. With additional education at the baccalaureate level and professional experience, you will enhance your skills and have more career options available.
Valencia College
2015-2016 Program Guide for the Associate in Science Degree in Radiography

Admission requirements are subject to change. Please check for any admission updates: valenciacollege.edu/west/health/admissionupdates.cfm

Application Deadline: January 15, 2016 for Summer 2016

Students are admitted to Valencia’s Radiography Program by a selective admission process. The Health Sciences Admission Committee selects a limited number of students once a year to begin the program in the Summer Term.

ADMISSION CHECKLIST

The admission requirements that MUST be satisfied PRIOR to submitting an application to the Radiography Program are:

1. Read about Radiography admission and program requirements at valenciacollege.edu/health and the Valencia Catalog http://valenciacollege.edu/catalog; read this program guide in its entirety and confirm you are capable of meeting the Core Performance Standards listed within this guide.

2. Be a U.S. Citizen or a U.S. permanent resident.

3. Attend a Health Sciences Information Session (strongly recommended). Information Session dates are posted on the Health Sciences website: valenciacollege.edu/health.

4. Submit a completed Valencia Application for Admission at http://valenciacollege.edu/, click on Future Students, Admissions, and pay the application fee; satisfy the requirements for Degree-Seeking Status, including submission of all official transcripts, and be in active student status.

5. Satisfy the Valencia entry testing requirements and satisfactorily complete any mandatory courses in reading, New Student Experience, mathematics, English and English for Academic Purposes in which you are placed (must be at college-level for reading, mathematics, and English). For more information about Mandatory Courses: http://catalog.valenciacollege.edu/entrytestingplacementmandatorycourses/mandatorycourses/

6. Complete the prerequisites for admission with a minimum grade of C:
   - BSC 2093C Human Anatomy and Physiology I
   - BSC 2094C Human Anatomy and Physiology II
   - *MAC 1105 College Algebra
   - *HSC 1531 Medical Terminology

*For admission into Summer 2016, MAC 1105 and HSC 1531 may be in progress by the application deadline, but must be completed with a minimum grade of C by the program start date.

*For admission into Summer 2017, MAC 1105 and HSC 1531 must be completed with a minimum grade of C by the application deadline.

To be competitive for admission, additional Science and General Education courses must be completed with high grades. See the point system that follows.
7. Have a minimum overall college GPA of 2.5 including all undergraduate transfer work.

8. Complete successfully the Test of Essential Academic Skills (TEAS) with scores posted to your Valencia record (paper copies of scores NOT accepted). The examination fee is the responsibility of the student. Information about the TEAS may be found at valenciacollege.edu/assessments. TEAS scores may be used for five years.

9. After completing Numbers 1 – 8 and prior to the application deadline, submit a Valencia Radiography Program application; pay the $15 non-refundable Health Sciences program application fee, and submit any required documentation. The application can be found at valenciacollege.edu/health.

Estimated program costs can be found at: http://valenciacollege.edu/west/health/AdmissionUpdates.cfm

GUIDELINES for ALL HEALTH SCIENCE LIMITED ACCESS PROGRAMS
(EXCEPT THE BACHELOR DEGREE PROGRAMS and ADVANCED TECHNICAL CERTIFICATES)

Valencia’s Health Sciences programs are offered through the Divisions of Allied Health and Nursing, which provide information about specific admission criteria for the programs. The Health Sciences Program Guides, of which this is one, are developed for a specific academic year (August to July) and, as a rule, changes to admission and program requirements become effective at the start of an academic year; however, Valencia College reserves the right to make changes in admission and program requirements as circumstances require. If a mid-year change becomes necessary, it will be indicated in the information for the specific program at http://valenciacollege.edu/west/health/admissionupdates.cfm.

Students interested in a health sciences career are encouraged to explore the many challenging and rewarding opportunities available in health sciences professions. Valencia offers eight health sciences programs which lead to an A.S. degree. They are Cardiovascular Technology, Dental Hygiene, Diagnostic Medical Sonography, Emergency Medical Services Technology (including EMT and Paramedic certificates), Health Information Technology, Nursing (R.N.), Radiography, and Respiratory Care. In addition, Bachelor’s degrees in Radiologic and Imaging Sciences and Cardiopulmonary Sciences, and advanced technical certificates in Computed Tomography and Magnetic Resonance Imaging are offered. Admission to these programs is limited because of clinical facilities and staff.

Students whose official records indicate they are seeking admission to a limited access Associate in Science (A.S.) health sciences program will have the health sciences program designated as their Secondary major and the Associate in Arts (A.A.) Degree designated as their Primary major in order to maximize their educational opportunities. If the student has already earned a Bachelor’s or A.A. degree, the student will not have A.A. designated as a Primary major.

Most programs have an application deadline, but some do not. If a program application deadline falls on Saturday, Sunday or a Valencia holiday, the deadline will become the following Valencia business day. Health Sciences program applications are available at valenciacollege.edu/health. Program applications received after the deadline date will not be considered for the identified term. Students who are not accepted will need to reapply for a future term.

Students interested in any health sciences program must be a U.S. citizen or a U.S. permanent resident, and must complete the Valencia Application for Admission and the application for the specific health sciences program. Admission to Valencia does not imply acceptance to the health sciences program.

Continued on next page.
Students may apply to more than one limited access Health Science program; however, enrollment is limited to only one Health Sciences program in a term. A new program application is required if reapplying for admission.

Having previously earned a college degree does not grant an advantage in admission to a Health Sciences program that does not require a degree for admission nor does it exempt students from taking the Test of Essential Academic Skills (TEAS) if the TEAS is required for admission to the program.

All communication from Valencia relative to program admission will be via your Atlas e-mail address. Written communication you initiate with Valencia staff should also be via your Atlas e-mail account and should include your full name and your Valencia ID number.

BACKGROUND CHECK, DRUG TESTING, IMMUNIZATIONS AND CPR CERTIFICATION

The Health Sciences programs include student clinical rotations in external affiliate health care facilities with which Valencia has agreements for student clinical assignments. The affiliates’ policies require that students serving in a clinical rotation be cleared of offenses that would disqualify them from participating in student clinical assignments. Thus, all students conditionally* accepted to a Health Sciences program are required to submit to a criminal background check, fingerprinting and drug screening as well as provide documentation of specific immunizations and CPR certification following acceptance to a program. The timeframe for meeting these requirements will be provided in the Orientation information that will be sent to the student upon acceptance through ATLAS email.

*If you have a positive background check, fingerprint or drug screening, you may be denied enrollment in a Health Sciences program due to the inability to participate in a student clinical assignment. If you have concerns regarding known background issues, it is recommended that you email questions to hscompliance@valenciacollege.edu.

MANDATORY ORIENTATION

The mandatory program Orientation for accepted students usually is held four to six weeks prior to the program start date. Once accepted to a program, students will receive an email via ATLAS regarding the Orientation date, requirements and deadlines. The Orientation materials will give the student information regarding the processes for completing background checks, fingerprinting, drug screening, and other requirements through CertifiedBackground.com.

TRANSPORTATION TO CLINICAL SITES

If accepted to a program, students will be responsible for furnishing transportation to the community and/or hospital facilities used by Valencia for clinical practice.

Valencia is an Equal Opportunity Institution.
The Health Sciences Admission Committee uses the following point system as a guide in the selection of qualified students to be admitted to the Radiography Program. Student selection is based on the total number of points earned below. In case of a tie, Overall GPA and the Health Sciences entrance test score will be considered.

OVERALL GPA ADMISSION POINTS AWARDED

<table>
<thead>
<tr>
<th>Overall GPA</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.50 – 2.85</td>
<td>1</td>
</tr>
<tr>
<td>2.86 – 3.00</td>
<td>2</td>
</tr>
<tr>
<td>3.01 – 3.20</td>
<td>3</td>
</tr>
<tr>
<td>3.21 – 3.40</td>
<td>4</td>
</tr>
<tr>
<td>3.41 – 3.50</td>
<td>5</td>
</tr>
<tr>
<td>3.51 – 3.60</td>
<td>6</td>
</tr>
<tr>
<td>3.61 – 3.70</td>
<td>7</td>
</tr>
<tr>
<td>3.71 – 3.80</td>
<td>8</td>
</tr>
<tr>
<td>3.81 – 3.90</td>
<td>9</td>
</tr>
<tr>
<td>3.91 - 4.00</td>
<td>10</td>
</tr>
</tbody>
</table>

PROGRAM COURSE REQUIREMENTS THAT AWARD POINTS TOWARD ADMISSION
The first four courses are prerequisites that must be completed by the program application deadline.

* MAC 1105 College Algebra and HSC 1531 Medical Terminology may be in progress by the January 15, 2016 application deadline, but must be completed with a minimum grade of C by the program start date. However, for the January 15, 2017 deadline, MAC 1105 College Algebra and HSC 1531 Medical Terminology must be completed with a minimum grade of C by the application deadline.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 2093C</td>
<td>Human Anatomy &amp; Physiology I (Prerequisite Course)</td>
<td>A=10 pts, B=8 pts, C=6 pts</td>
</tr>
<tr>
<td>BSC 2094C</td>
<td>Human Anatomy &amp; Physiology II (Prerequisite Course)</td>
<td>A=10 pts, B=8 pts, C=6 pts</td>
</tr>
<tr>
<td>*MAC 1105</td>
<td>*College Algebra (Prerequisite Course)</td>
<td>A=10 pts, B=8 pts, C=6 pts</td>
</tr>
<tr>
<td>*HSC 1531</td>
<td>*Medical Terminology (Prerequisite Course)</td>
<td>A=5pts, B=3 pts, C=1 pt</td>
</tr>
</tbody>
</table>

The following courses are required for the degree and will result in more admission points if completed with a minimum grade of C prior to the application deadline.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>A=3 pts, B=2 pts, C=1 pt</td>
</tr>
<tr>
<td>CGS 1060</td>
<td>Introduction to Computers (or CGS 2100 Computer Fund. and Apps.)</td>
<td>A=3 pts, B=2 pts, C=1 pt</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>A=3 pts, B=2 pts, C=1 pt</td>
</tr>
<tr>
<td>**Humanities</td>
<td>Any course that meets the General Education Humanities requirement</td>
<td>A=3 pts, B=2 pts, C=1 pt</td>
</tr>
</tbody>
</table>

** Humanities requirement subject to change. Please check [http://valenciacollege.edu/west/health/admissionupdates.cfm](http://valenciacollege.edu/west/health/admissionupdates.cfm) for the most updated information.

RELATED EXPERIENCE ADMISSION POINTS AWARDED
Points may be earned for ONLY ONE of the following and documentation must be submitted.

<table>
<thead>
<tr>
<th>Certification</th>
<th>Course Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>Radiation Therapy RT (T), Sonography (RDMS), Nuclear Medical Tech(NMT), Cardiovascular Tech (CVT)</td>
<td>10 pts</td>
</tr>
<tr>
<td>Certification</td>
<td>Nurse (RN), Medical Lab Tech (MLT), Medical Tech (MT), Respiratory Therapist (RRT)</td>
<td>5 pts</td>
</tr>
<tr>
<td>Career Pathways Graduate</td>
<td>A high school program</td>
<td>2 pts</td>
</tr>
</tbody>
</table>

ADDITIONAL ADMISSION POINTS AWARDED (OPTIONAL)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 1007C</td>
<td>Physics (or higher-level Physics course)</td>
<td>A=6 pts, B=4 pts, C=2 pts</td>
</tr>
<tr>
<td>HSC 1004</td>
<td>Professions of Caring</td>
<td>A=3 pts, B=2 pts, C=1 pt</td>
</tr>
<tr>
<td>SLS 1122</td>
<td>New Student Experience</td>
<td>A=3 pts, B=2 pts, C=1 pt</td>
</tr>
<tr>
<td>Alternate</td>
<td>Previous year applicant selected as an Alternate</td>
<td>3 pts</td>
</tr>
</tbody>
</table>

Total Points = ________ Total Possible Points: 82
## RADIOGRAPHY
### CORE PERFORMANCE STANDARDS FOR ADMISSION AND PROGRESSION

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>STANDARD</th>
<th>EXAMPLES OF REQUIRED ACTIVITIES (NOT ALL INCLUSIVE)</th>
</tr>
</thead>
</table>
| Critical Thinking | Critical Thinking ability sufficient for safe clinical judgment.                                                   | * Identify cause-effect relationships in clinical situations.  
* Evaluate radiographs to ascertain that they contain proper identification and are of diagnostic value.  
* Select exposure factors and accessory devices for all radiographic procedures with consideration of patient size, age, and extent of disease.  
* Assess patient’s condition and needs from a distance of at least 20 feet.  
* Initiate proper emergency care protocols, including CPR, based on assessment data.                                                                                                                             |
| Interpersonal | Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.                             | * Establish rapport with patients, families, and colleagues.  
* Display compassion, empathy and concern for others  
* Demonstrate a high degree of patience.  
* Work with other healthcare providers in stressful situations                                                                                                                                                                                                                                       |
| Communication | Communication abilities sufficient for interaction with others in verbal and written form.                        | * Communicate in English to the patient in order to: converse, instruct the patient, relieve anxiety, gain their cooperation during procedures, understand the patient when communicating symptoms of a medical emergency.  
* Read the patient’s medical chart and/or physician’s orders.  
* Legibly write patient history.  
* Documents own actions and patient responses as indicated.                                                                                                                                                                                                                                      |
| Mobility     | Physical abilities sufficient to move from room to room and maneuver in small spaces.                               | * Assist all patients, according to individual needs and abilities, in moving, turning, transferring from transportation devices to the x-ray table, etc.  
* Be able to push, pull, and lift 40 pounds.  
* Push a stretcher, wheelchair or other transportation device without injury to self, patient, or others.  
* Push a portable x-ray machine from one location to another, including turning corners, getting on and off of an elevator, and manipulating it in a patient’s room.                                                                                             |
| Motor Skills | Gross and fine motor abilities sufficient to provide safe and effective care.                                       | * Manually move the x-ray tube and position the tube at various angles at heights up to 7 feet.  
* Accurately draw up sterile contrast media and other solutions without contaminating the syringe and/or needle, etc.  
* Place cassettes in Bucky trays and spot film devices and properly manipulate all locks.  
* Physically be able to administer emergency care including performing CPR.  
* Be able to stand for periods as long as 2 hours wearing lead aprons and to walk a distance of 2 miles during a normal work day.  
* Input data into computer                                                                                                                                                                                                                                                                       |
| Hearing      | Auditory abilities sufficient to monitor and assess patient needs, and to provide a safe environment.                 | * Hear a patient talk in a normal tone from a distance of 20 feet.  
* Hear monitor alarm, emergency signals, and cries for help.                                                                                                                                                                                                                                                                            |
| Visual       | Visual ability sufficient for observation and assessment necessary in the operation of equipment and care of patients. | * Observe the patient in order to assess the patient’s condition and/or needs from a distance of, at least, 20 feet.  
* Can see numbers, letters, calibrations, etc. of varying sizes located on equipment utilized by a radiographer.                                                                                                                                                                                                                     |
| Tactile      | Tactile ability sufficient for patient assessment and operation of equipment.                                       | * Perform palpation, tactile assessment, and manipulation of body parts to insure proper body placement and alignment.  
* Manipulate dials, buttons, and switches.                                                                                                                                                                                                                                                                                  |
RADIOGRAPHY
CORE PERFORMANCE STANDARDS FOR ADMISSION AND PROGRESSION

Radiography is a practice discipline with cognitive, sensory, affective, and psychomotor performance requirements. Based on these requirements, the above list of "Core Performance Standards" has been developed. Each standard has an example of an activity or activities, which a student will be required to perform while enrolled in the Radiography Program. These standards are a part of each Radiography course and of the professional role expectation of a Radiographer.

For the purpose of the Radiography Program, a “qualified individual with a disability is one who, with or without reasonable accommodations or modifications, meets the essential eligibility requirements for participation in the program.” The Division of Allied Health at Valencia makes no preadmission inquiries concerning an applicant’s disability status. Information related to an applicant’s disabilities is not a part of the information reviewed by the Admission Committee.

These Performance Standards should be used to assist students in determining whether accommodations or modifications are necessary for the student to meet program requirements. A student who identifies potential difficulties with meeting the Performance Standards should communicate his/her concerns to an advisor in the Office for Students with Disabilities. The student has the responsibility to identify and document the disability and to request reasonable and appropriate adjustments. Determination is made on an individual basis as to whether any accommodations or modifications can be reasonably made.